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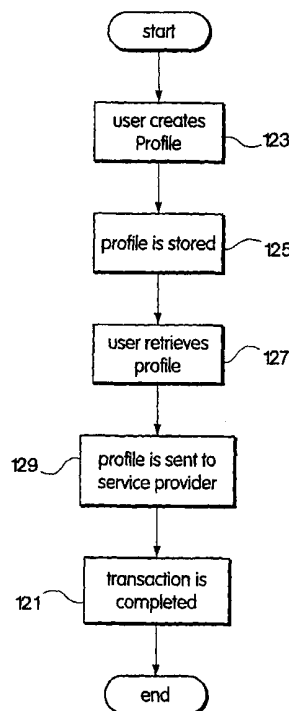
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- (71) Applicant: **STEPHENSON PARTNERS** [US/US]; 28 Alton Street, Brookline, MA 02446 (US).
- (72) Inventors: **WEST, Alexander, S.**; 28 Alton Place, Brookline, MA 02446 (US). **BRISSETTE, Stephen**; 57 Waverly Street, Brookline, MA 02446 (US).
- (74) Agents: **PHAM, Chinh, H.** et al.; Foley, Hoag & Eliot, LLP, One Post Office Square, Boston, MA 02109 (US).
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(54) Title: SYSTEMS AND METHODS FOR THE COMPLETION OF TRANSACTIONS



(57) Abstract: A system and method for performing a transaction where a profile that was previously generated by a user can be stored on a storage device, permitting the user to retrieve the profile and transmitting at least a portion of the profile from the storage device to a provider where the portion bypasses presentation to the user and the transaction is completed between the user and the provider based on information in the portion.



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Systems and Methods for the Completion of Transactions

Background of The Invention

1. Field of the Invention

5 The present application relates to systems and methods for completing transactions, and more particularly to systems and methods for decreasing in-store process time for habitual retail transactions.

2. Description of Related Art

10 In the modern high-tech world, the speed and convenience offered by fast food establishments, drive through retail stores, wireless communication, prepared products, and point and click purchasing over the Internet has increased consumers' expectations of ease and timeliness in everything they do. Consumers have acknowledged that convenience is important to them, and they are more willing to pay
15 more for products that have been presized, precut, and pre-prepared than they are to spend the time doing it themselves.

 This hectic lifestyle, however, does not always live up to its expectations. It seems that no matter how quickly an individual moves, there are still times that he gets stuck waiting on others, in as just as much of a rush as himself. Even as the
20 technology to produce easy to use and quick to consume goods and services has increased, the technology to provide those goods and services to the final customer has remained steady. Point and click purchasing slows down when a server gets congested, and the time saved in purchasing precut lettuce can be lost waiting for a 10 items or less cashier to make it through the 5 customers in front of you.

Customer lines in retail and service establishments are often some of the most noticeable bottlenecks in the high-tech, high speed, lifestyle. Even as the products purchased become quicker to make and to consume, the lines to get to them seemed to have slowed. The problem lies in the traditional method of ordering. No matter what product or service is that is being provided and how fast that order can be fulfilled, the order must still get from the customer to the provider, the provider needs to be able to provide the good or service, the customer needs to pay for the good or service, and the good or service must change hands from the provider to the customer.

It is the bottleneck of communicating from the customer to the provider that leads to the problem of lines. No matter how uniform products or services become there is always some variation. In one of the most uniform types of goods, fast food, most restaurants still have a variety of items on their menus, in a variety of sizes, and with a variety of different options. The exact order therefore needs to be communicated to an employee, entered into a cash register, and communicated to the food preparer. Each of these steps takes some discrete time.

For customers who place regular orders, the waiting in line to communicate their order to the employee can be even more frustrating. In food service in particular, there are customers who arrive at a certain time on a regular schedule and order the same meal. At many more traditional restaurants these customers can be remembered by employees and are often provided with enhanced service because the employees know to expect the arrival of the customer, know what they are going to order, and can have the dish already in preparation upon their arrival. These “regulars” therefore get the benefit of bypassing the wait to communicate their order and can speed up their waiting time during preparation of their order because some preparation has

already been completed. These customers also get the special service that comes with being a known individual.

In the fast food environment, and many other types of quick, mass-market, retail this type of bypass for regular customers is simply not available. In order for a fast-food chain to serve enough \$0.99 hamburgers to stay alive, it requires enough people to flow through that employees may not be able to remember the regulars. In addition, chain restaurants, because of their similarity of menu, can have a regular who goes to multiple different locations always ordering the same thing. This regular will likely not be recognized by employees because at any single restaurant location the customer is not regular at all.

The ability to be remembered as a prior customer and to bypass the step of placing the same order with the provider on repeated occasions has already spawned some systems to try and keep track of important customers. On the Internet, e-businesses spend large amounts of money to try and learn what each individual purchaser is going to want to buy and to track those users all over the Internet. Sites make suggestions for future purchases based on what you have already ordered, other sites remember what you purchased or considered purchasing the previous time you were there and suggest it again, while still other sites say "welcome" followed by a name when a return purchaser arrives, possibly allowing them to enter a site the customer has designed to fit their shopping preferences.

These systems, however, only work on the virtual world of computer networks and as good as Reallybigbookstore.com is at recognizing when customer 39djk39 hits their webpage, this information does nothing when the same customer walks into Reallybigbookstore's brick and mortar location. The customer is not recognized, and

they do not get the individualized and expedited treatment they are used to on the Internet. They are still herded into lines.

There can be little doubt that business is lost because of the lines, there are few products available today which are available in one location and not available in
5 another location a short walk down the street. Lines often drive a customer from one location to another, because they do not want to wait. Retail stores and restaurants loose customers as those who arrive head-off to the competition instead of waiting.

To try and avoid the loss of customers, ordering has been simplified to try and make as much information presentable in as few words as possible and accelerate the
10 speed with which a line can be processed. Most fast food restaurants have predesigned “meals” that can be ordered by number to allow a lot of communication in a small time. These systems, however, only save time through more universal use and the lines to present even these simplified orders can still be long. In addition, this “shorthand” ordering does not allow for customization without specific specification
15 of the changes to the employee avoiding much of the benefit from the system.

To try and maintain the business of frequent purchasers or regular customers, many business have implemented preferred customer programs. These programs may offer special discounts or promotions to regular customers or may try to avoid some of the waiting. The problem with these programs, however, is that they do not allow
20 bypassing the lines to purchase goods or services because they still require a presentation and verification of a purchase to a consumer before the transaction is processed. This means that the customer can only get access to the service ahead of their purchase, must spend the time to verify their purchase, and must be able to carry out their purchase on a device they can interact with. This limitation is best shown
25 with regards to a rental car frequent renter program.

A program of this type is shown in FIG. 1A and permits the user to generate a frequent buyer default (101). This default may contain information related to personal information, payment information, and a preferred rental information and will be stored in a convenient location (102). When the user wishes to purchase based on this default he can access the default (103). The default then requires him to enter the default to complete the transaction. That is, the user needs to either approve the default (105) to send it to the provider (108) or needs to enter changes to the default (106) and send the altered default to the provider (107), before a transaction can be completed (109). These steps require that the user must access the profile via a device that can accept their input and require the user to spend time approving or modifying the default and communicating the result to the provider. The device therefore needs to have some form of display to present the user with the profile, and must be able to accept a variety of input from the user. This limitation can require additional time for the user to spend entering or verifying information, and can limit the types of devices and location of devices, that can be used to retrieve the default. To provide an example, it can be very difficult for a user to provide text feedback over a web access cellular phone, as entering text can be a complicated task on a standard cellular phone keypad. Further, it can be very difficult to enter or view information on a simple device, such as a pager. In addition, for these types of systems to be used at the point of sale, the time it takes for entering text can create an additional line where preferred customers are required to wait for other preferred customers to finish using the device. In this case, the device essentially becomes an automated cashier having the user communicate with a computer "employee" instead of the human. This does not lead to significant time savings. In addition, the system, because of this affirmation or alteration of the order cannot have fully automated or pre-authorized payment as the

amount of the payment is dependent on the order finally chosen. The system has to carry out a separate credit verification each time the user places an order.

It is therefore desirable to have a system that bypasses presentation of the order to the user before the transaction is made. As part of this, it is further desirable
5 to have a system that enables a user to complete a transaction without having to provide any further information regarding himself.

Summary Of The Invention

Because of problems such as these, it is desired in the industry to create a
10 system and method for performing a transaction where a profile that was previously generated by a user can be stored on a storage device, permitting the user to retrieve the profile and transmitting at least a portion the profile from the storage device to a provider where the portion transmitted bypasses presentation to the user, and completing the transaction between the user and the provider based on information in
15 the transmitted portion. The profile might include the order or payment information in certain embodiments. The storage device may also be a database.

The user can generate the profile through many methods, including generating the profile over a network such as the Internet or World Wide Web, through the use of an audio communication such as over a telephony device, or through the use of a
20 hardcopy that can then be mailed in or transmitted (for instance by facsimile machine) to the storage device.

In retrieving the profile, the user can use, in one embodiment of the invention, an information retrieval system, which could be a computing device, and may enter input into a data entry device. This input may include an entry identifier such as
25 alphabetic, numeric or alphanumeric codes; scannable or machine-readable codes such

as bar codes, magnetic codes, or digital signatures; biometric identifiers such as voice identification or fingerprint identification; or any combination of entry identifiers.

The entry identifier could be provided to the user in a tangible form such as a card, tag, sticker, or printed page or stored on a mechanical or electrical device.

5 In this document the following terms generally have the meanings provided below, but these meanings are not intended to limit the clear scope and meaning of any of these terms as known by people skilled in the art.

 ‘User’ generally denotes an entity, such as a human being, using a device, such as one allowing access to a system for creating a profile and then completing a
10 transaction based on the profile. The user will generally be interested in the acquisition of a good or service that they purchase on a regular or habitual basis but such regular activity is not necessary. Although it generally refers to a user interested in a particular good or service (for example, a hamburger), it could also refer to a user interested in a general class of goods or services (for example, fast food), or a
15 personalized good or service. A user could also be representing a company, agency, association, or any other entity, either in an employee, agency, contractor or any other relationship seeking to acquire goods or services for the benefit of that entity. A user could also be an automated process seeking to acquire goods or services. A user can also be a provider in a different transaction, or a different part of the same transaction.

20 ‘Browser’ generally denotes, among other things, a process or system that provides the functionality of a client, such that it interconnects by a network to one or more servers. The browser may be Microsoft’s Internet Explorer, Netscape’s Navigator, or any other commercial or custom-designed browser or any other thing allowing access to material on a network.

'Client' generally denotes a computer or other thing such as, but not limited to, a personal digital assistant (PDA), pager, phone, WebTV system, or any software or hardware process that interconnects by a network with one or more servers.

5 'Server' generally denotes one or more computers or similar devices that interconnect by a network with clients and that have application programs running therein, such as for the purpose of transferring computer software, data, audio, graphic and/or other similar material. A server can be a purely software based function. Server also includes any process or system for interconnecting via a network with clients.

10 'Provider' generally denotes an entity interested in providing goods or services in exchange for value. A provider will generally be a commercial entity seeking to exchange goods or services for currency or monetary instruments, but it could also be any entity seeking to sell goods or services, or exchange goods or services for other goods or services. A provider need not be commercial or for profit. A provider
15 includes users seeking to solicit donations to charitable causes, or seeking investment opportunities. A provider could also be an entity representing a company, agency, association, or any other entity, either in an employee, agency, contractor or any other relationship seeking to provide goods or services to potential users for the benefit of that entity. A provider can alternatively be an automated process such as, but not
20 limited to, an automated sales program. A provider can also be a user in a different transaction, or a different part of the same transaction.

"Data Entry Device" is generally a device that allows a user to input some type of identifier to retrieve a profile and either supply, or signal another device to supply, information from that profile to a provider. A data entry device could typically be,
25 but is not limited to, a computing device; a PDA; a wireless transmitter/receiver; a bar

code scanner; a voice recognition system or other type of biometric recognition system; a magnetic card reader; a smart card reader; a numerical, alphanumeric, or other type of key entry system; any type of data entry device attached to a network; a wireless or landline phone or system; a text recognition system; a touch screen; a pointing device; a sound or light sensor; or any other type of device or combination of devices that allows the entry of any type of identifier that can uniquely identify a user.

Brief Description Of Drawings

FIG. 1A is a high-level diagram of the prior art.

10 FIG. 1B is a high level diagram of one embodiment of the invention.

FIG. 2A is a diagram of the set-up portion of one embodiment of the invention

FIG. 2B is a diagram of the usage portion of one embodiment of the invention

FIG. 2C is a diagram of one embodiment of a relationship marketing portion of one embodiment of the invention.

15 FIG. 3 is an example of templates and the generation of a profile in one embodiment of the invention.

FIG. 4 is an example of an embodiment of the invention in a Quick Service Restaurant (QSR).

20 FIG. 5 shows a sample card for providing an entry identifier to a user in one embodiment of the invention.

Detailed Description of the Preferred Embodiment(s)

As one embodiment of the subject invention, the following descriptions and examples are discussed primarily in terms of a method for executing a transaction between a human user and a provider, such as a Quick Service Restaurant (QSR)

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having a relatively constant menu. It would be understood by one of skill in the art that a provider could be any type of provider, as discussed above, and could provide any type of goods or services based on the order provided. The system is generally described as a construct executing at least partially over the World Wide Web
5 utilizing Internet software executing within a browser, other software executing in a server, and/or software proprietary to an operator of the system and/or the provider. Alternatively, the present invention may be implemented by Active-X , Java, C++, other programming languages, other custom software schemes, telecommunications and database designs, or any of the previous in any combination. The system can also
10 be implemented on any type of network including the Internet, the World Wide Web, an intranet or extranet system, a proprietary network, or any other type of network recognized by those skilled in the art existing now or in the future. However, alternative embodiments will occur to those skilled in the art, and all such alternate implementations are included in the invention as described herein.

15 An overview of a method in accordance with one embodiment of the invention is shown in FIG. 1B. In FIG 1B, a user creates in step (123) a profile on the system, this profile including information. The profile will generally include an order, which includes instructions meant for the provider to describe what the user wishes to purchase, and additional information about the user. The profile, however, may also
20 only include the order. In some cases when the user retrieves his profile, only the order will be transmitted to the provider. However, for simplicity of discussion, the phrases transmission of a profile and transmission of an order will both be used regardless of whether the order is transmitted alone or with other information from the profile. The profile is then stored in step (125) in a storage device until it is retrieved
25 by the user in step (127). When retrieved, the profile is sent in step (129) from the

storage device to a provider without being presented to the user. In this way, the profile bypasses the decision making steps of the user. Generally, a user's account will also be debited or charged when the profile is retrieved for the cost of the order included in the user's profile. When the profile is received by the provider, the
5 provider knows a customer has placed an order and has instructions (based on the order) describing how to complete the transaction in step (121).

It should be recognized that the act of a user "retrieving" a profile does not necessarily mean that the profile is returned to the user, or that the user himself actually calls up the profile. The term "retrieve" as used also refers to the act of the
10 user desiring to access, use, or otherwise activate the profile so that the profile can be used to transmit the order or the profile to a provider as discussed below. Therefore the act of retrieving could be performed by an automated system based on a recorded command from the user, and/or the retrieval can result in the profile being presented in a manner that bypasses the user. In an example, the act of entering an identifier
15 into a data entry device would be sufficient to "retrieve" the profile even if the data entry device was unable to display or process the profile.

By way of example, the method, in one embodiment, allows consumers to speed the transaction process for frequently purchased food items by registering their frequently purchased products and payment preferences on the Internet or by
20 telephone, prior to the store visit. The preference data specific to a particular consumer is stored in a data warehouse. Once registered, the consumers may, for example, scan bar-coded tags keyed to their registered preference data at any of store in the chain. Once scanned, preference data is printed or displayed in the preparation area of the store, thereby allowing the consumer to bypass the ordering/payment
25 portion of the store visit.

In addition, as the method permits more purchasing consumers to visit a particular store, more transactions can be carried out within a store. This is because the system allows retailers to decrease consumer time in the store, particularly in line, thus increasing net turnover and throughput, and simultaneously reducing the number
5 of consumers who "balk", leave, or refuse to enter a too-busy store.

FIG. 2 shows a layout of a process in accordance with one embodiment of the invention. The process is illustrated with several interrelated sub-processes. FIG. 2A shows the set-up portion of the method that allows the user to create or change what is included in a profile including the order. This sub-process will generally be carried
10 out by the user at some time prior to the purchase of their order and may be done far in advance of the purchase. FIG. 2B shows the actions when the profile is retrieved for the purpose of completing a transaction. These two activities will be temporally separated and may be used a different number of times. Generally a user would set up a profile once and use it many times, but such activity is not necessary. FIG. 2C
15 shows an optional third activity where a system operator, or the system, can record data and/or perform data analysis based on the profiles. Examining FIG. 2A first. The user (301) accesses a device which will permit her to enter information into the profile. In one depicted embodiment, the device comprises a client (303) connected to a network (304) through a browser where a server (305) is designed to receive the
20 profile. This connection can be through a wired or wireless connection. Here the server (305) provides a template (307) such as an Internet form which the user can populate with information and return to the server. Such a form is however not necessary and any method for communicating information from a client to a server over a network can be used in the generation of the profile. In a second depicted
25 embodiment, the user (301) uses a telephony device (313), such as a landline phone,

wireless phone, telephony equipped computing device (such as a VoIP system), or other aural communication device and calls a receiving system (315) such as an intelligent network component, voice mail system, a telephone, a computer modem, or a human operator, which then records information for the profile as it is spoken. In a
5 third embodiment, the user (301) writes out on a physical medium (321) the desired information for the profile. And then sends this information via a transfer device (323), such as a facsimile machine, which then communicates the profile either directly or after interpretation. The depicted embodiments do not present all available
10 embodiments for getting the profile from the user to the system but are merely exemplary. Other methods for receiving a profile include, but are not limited to, using printed material provided on paper which may be mailed or scanned; interactive digital or analog information in the form of audible questions in which audible answers are recorded on a telephone, in-store kiosk, or any other audio
15 communications device; or visual electronic information on any presentation device such as a computer screen, touch sensitive screen, television, personal digital assistant, or any other visual communications device.

Once the profile has been generated, it is sent to a information processing system (333). In one embodiment, the profile may include purchasing information for automatic charging of a purchase when the profile is retrieved. Such a system could
20 be desirable because it automates an additional step in the transaction and allows the user to obtain their purchase without having to perform a separate purchasing step. In one embodiment, purchasing may be performed using third party purchasing instruments such as credit cards, bank cards, debit cards, or prepaid service programs. In these cases, it may be desirable to insure that there is available credit or funds
25 available on that payment instrument to the user (301). In that case, an authorization

system (335) such as a credit checking system could be contacted by the information processing system (333), to insure that the user is authorized to use that payment instrument and possibly to allow a credit limit or account balance to be generated at the information processing system (333).

5 The information processing system (333) will generally be a computing device or processor, although it could be any device or system capable of controlling the receipt of profiles, the storage of profiles, and the retrieval of profiles. The information processing system (333) will generally include a database (337) or another type of storage device such as, but not limited to, removable storage, magnetic
10 storage such as magnetic disks, optical storage, volatile or non-volatile solid state memory, any analog storage device, a hard copy or paper storage device, any other storage device known now or later discovered, or any combination of storage devices, for storing the profiles and/or other information related to the profiles. The information processing system (333) can also include data collection functions that
15 allow data on the users who have generated profiles, or those profiles themselves, to be collected. This data may be of any type known to the art, and may be stored, duplicated, analyzed, aggregated, mined, or altered by any method known to the art as part of the information processing system (333).

In one embodiment of the invention, the system uses the resources of the
20 provider as part of the storage, retrieval, and/or data collection functions. This may be a local network (339) present at the provider that could be at a single physical location or could interconnect multiple physical locations in a network. In a simple embodiment, the local network (339) could be a single computing device or other device having the functionality of being able to store and retrieve profiles. The use of
25 a local network (339) could be desirable in transactions involving QSRs. Many QSRs

provide local networks (339) connecting individual physical locations and used for storing menu items, recipes, inventory and other information specific to the individual location. That information may also be updated on a regular basis from a home or master system to insure that the local QSR receives all necessary information and support from the home office regardless of location. For instance, when the QSR home company decides to add a new menu item, marketing materials, recipes, ordering information, and other information can be sent from the home office via the local network to QSR locations. Those QSR locations then have access to all necessary information to insure that they can provide the new product and that the new product is universally presented across all QSRs.

In one embodiment of the local network, that local network comprises a database (341) or other storage device, either at the home location, at the local QSR location, or at some other convenient location, for storing user profiles. In one embodiment, the profiles would be sent from a central location (either the information processing system (333) or a central location on the local network (339)) and changes to the profiles can be transferred from this central location with a regular update sent to each individual QSR location. The individual QSRs could then all have their own databases of the profiles. It may be desirable to include profiles of users registered to a particular QSR so that each local establishment has records of those having profiles that might be used at that particular restaurant. In addition, this local storage can allow regionalization of storage (for instance only storing certain profiles in certain geographical areas) to save resources, or could allow a single profile to be quickly added or updated across a wide geographical area.

Alternatively, the information processing system (333) or a central controller on the local network (339) could be used to store the profiles, the data entry device

then accessing that central location to retrieve the profile via a network or other communication. This embodiment could be beneficial because it allows cheaper central storage as well as the potential for quicker updating of the profiles.

For purposes of this application, examples will be used where the information processing system (333) stores the profiles and is accessed to retrieve a profile. It should be noted that this is for convenience only and any statement of the retrieval of a profile and/or any other information from or by the information processing system (333) could easily be altered to retrieve the profile and/or information from or by any alternative storage location, and all such alterations are included within the scope of this disclosure. Further, any extra functionality attributed to the information retrieval system (333) could also be included on any other appropriate system on or off the local network (339) and all such embodiments are included in this disclosure.

In addition to the information processing system (333) providing profiles to components of the local network (339), the local network (339) could also provide valuable information back to the information processing system (333). For example, the local network (339) could maintain records of when certain users retrieved their profiles and/or where they were retrieved (for example the specific QSR retrieved, or even the specific device used for retrieval). This information could be useful to predict customer behavior and future customer trends. Information related to performance of the QSR for profile-based transactions could also be returned to allow a collection of data on a QSRs performance on the profile based transactions to ensure that sufficient customer service is being provided.

In addition, as shown in FIG. 2C the system could use this returned information for marketing or other promotional purposes. In FIG. 2C, the information processing system (333) can receive information from either the data entry device

(353) and/or the local network (339) related to the retrieval of the profile, or other statistics related to the profile. This information can then be stored by the information processing system (333) and/or can be evaluated, tracked, mined, summarized or in any other way manipulated to generate useful statistics related to the profile. These statistics could then alternatively be sent back to the local network (339) for use by the provider to identify regular customers' patterns and purchasing habits, could be sent to the data entry device (353) for any purpose, or could be used by the information processing system (333) or an operator of the information processing system for any purpose. The data could further be combined from profiles from users across multiple providers in a similar industry, or across multiple industries, to compile more general statistics. The information could also be used in "on-the-fly" generation of marketing or other opportunities. For instance a user could automatically receive a 10th purchase free, or could be provided with a discount for coming in so many times in a certain time period. Customer messages could also be generated based on the profile, for instance an out-of-town user ordering according to their profile at a different location could be announced to staff so they could ask the visitor how their travel is going. Further, random games or contests could be performed giving a user a chance to win a prize whenever they retrieved their profile. The system could also allow passive access to the data through terminal (343) to allow either the provider or an operator of the system to generate finance or marketing reports, sales data, usage rates, or any other type of collection of data that may be desired. Active access could also be provided through terminal (343) allowing a human operator to introduce special offers, marketing offers, offers for free samples, free products, bonus and special pricing, or anything that might be desired to improve the relationship with the user or to promote additional marketing to the user. The

terminal could also be used to generate, discontinue, or alter the on-the-fly opportunities.

FIG. 2B more directly shows how the profile enables a transaction to be completed when it is retrieved by the user (301). When the user (301) wishes to engage in a transaction based on her profile, she retrieves her profile at a data entry device (353). This will generally be done via some form of identifier which uniquely identifies the user to the data entry device (353). The data entry device can be anything allowing the user to access her profile, and it need not be able to communicate directly with the user. For instance, the data entry device (353) could be a bar code reader and the user (301) could have a printed card with a bar code thereon. The user may be unable to provide any information to the bar code reader other than the bar code they have been presented with. This type of system could be beneficial because it can provide a lessened chance of data being incorrectly understood by the system, and can be more secure as the unknown bar code may have nothing to identify where it is useful. The data entry device then communicates with the information processing system (333) to retrieve the profile. Once retrieved, the transaction ordered by the profile can take place automatically. For instance, the central controller could access an authorization system (335) to charge the user for the order contained therein and could communicate the order to the Local network (339) or directly to the provider to place the order. In a QSR system, this communication could comprise translating the order from the profile into a presentation on the food preparation area's presentation device (373) for the preparation of orders. This presentation can be of any form used in the art but will often be a computer screen listing the components of the order and the rank of the particular order with regard to

other orders to be prepared. The provider can then fulfill the order which has been presented to them which completes the transaction.

It should be clear that the user (301) using this system can bypass any waiting at a QSR or other provider by using this system. The user simply retrieves their
5 profile and picks up their order. The system allows the user to bypass any lines to communicate with a cashier, and also allows the user to not be concerned their order will be misunderstood as it can be placed directly to the preparation area in a format that is familiar to those performing the preparation.

FIG. 3 shows one embodiment for creating a user profile. In FIG. 3, there is
10 provided a collection of data templates (201) that the user will populate with specific information they wish to store in the profile. Here there are three data templates (201); a payment information template (203), a personal identification template (205), and a provider's menu template (207). It is not necessary to include these particular three templates as part of the profile and the information requested by these templates
15 could be provided on any number of templates in any order, or, a different number of templates could be provided asking for any information that may be desirable for a profile (209). In an alternative embodiment, the profile (209) could only include a single template from this set or a subset of templates, could include additional templates not shown here, or could comprise any combination of templates provided
20 or not shown. Further, templates need not be used and the user could input data freehand in any order. The information collected comprises the profile (209) and will generally be the aggregate of the order outlined by the user based upon the templates, including the goods and services to be delivered to the user, the ways in which the user would like the goods and services to be modified, if at all, the manner in which
25 the provider will be compensated by the user for the goods, and any other information

provided by the user. If the manner of payment chosen by the user is to use a third-party payment system such as a credit or debit card, data may be included to obtain any needed authorizations for the expected amount of the transaction. None of this information, however, need be included. The system could also be configured to take
5 in any information desired to be placed in the user's profile (209).

The sample templates presented in FIG. 3 are simplified but could represent a system where the information collected relates to a regular or habitual purchase of food from a QSR with a relatively constant menu. The payment information therefore asks for information which could be used to perform the transaction for food. Here
10 the intended payment instrument is a credit, bank, or debit card although other payment schemes such as, but not limited to, prepaid transactions, smart card or other prepaid card transactions, cash transactions, bill-me-later type transactions, transactions involving the extension of credit to the user, barter transactions, or any combination of these could be used instead of or in addition to the credit/debit
15 transaction shown. In the credit/debit transaction shown, however, various information is collected about the user to facilitate payment. In particular, her card type (231) and her name as it appears on the card (232). The mailing address for the user, or the billing address of the card (233). The telephone number of the card holder (235), and her e-mail address (237) are also included fields. These fields are often
20 included as part of verification information with regards to credit cards, although any or all of them can not be provided. In addition, the payment information has a field for demographic information (239) which can be used to allow the user to enter general information about herself which could be used for marketing, data collection, or promotional purposes. A user might be asked to provide demographic information
25 such as, but not limited to, her sex, income, education, or purchasing history. These

questions could provide a limited answer set (for example sex can have the options “male” and “female”) or could allow the user to enter any value she wanted to. In addition, the demographic information could change dependent on the provider the user wishes to create a profile for (for instance a donut shop could ask different
5 questions than a take-out Chinese restaurant)

The next template provided asks for personal information. This information could be used to uniquely identify the user or could be used to allow an operator of the system to contact the user directly. Such contact could be for, but is not limited to, providing special offers, verifying information, security concerns, providing billing
10 information, or for any other purpose known in the art. The personal information requested includes the user’s name (251), address (253), telephone number (255), E-mail address (257) and again demographic information (259). As discussed previously, any selection of these fields or other fields may be present in a template without deviating from the scope of this invention.

15 The final template shown is the provider’s menu template (207). Which is where the user produces the order. The order is the particular purchase with all options that the user wishes to have recorded in the profile. This could be an entire meal, or simply a quick snack or single item. In most cases it is expected that the user will enter an order he regularly or habitually purchases. For example, a user may stop
20 by a donut shop every day on his way to work for a small black coffee and a glazed donut with rainbow sprinkles. This order could be entered into the profile to enable its retrieval by the user on his morning stop. In the provided example, the template is one that might exist for a QSR with a very small menu, in particular, there are only two items provided, Item 1 (271) and Item 2 (272). This menu is by no means
25 dispositive and any listing of menu items in any number could be included. In

addition, although the template is referred to as a “menu” there is no need for the items to be food items. Indeed this disclosure specifically covers menus of items including, but not limited to, retail goods, wholesale goods, services, personalized goods, personalized services, food items, tickets, rental items, charitable donations or
5 causes, information services, news services, subscription services, or any other type of good, service or other thing that might be of interest to a user. A menu could also provide a plurality of different types of items, for instance a food service menu might also have options for plates, silverware, chopsticks, or other commonly desired items associated with food. The menu provided is also shown to be static. Although the
10 system would be useful for a relatively static menu, a variable menu could also be provided to a user (possibly with seasonal or other dynamic choices, or the menu could be updated when required, possibly requesting updates from the user if necessary). This simple food service template is only provided as an easily understood example. In this template, there are also attributes included for the items
15 present which can be selected by a user. Item attributes are choices or options that are available for a particular item. In some cases, the selection of an attribute might be required (such as the size cup used for a beverage) while in other cases the attributes may be optional additions to the item (for example getting lettuce on a hamburger). Here the item attributes include size (273) for Item 1 (271) and color (275) for item 2
20 (272). These attributes can correspond to different options for the items provided on the menu. Here the user has four different sizes of Item 1 (271) to select from: small, medium, large and extra large (277). The user here has selected to receive Item 1 (271) and has selected (279) to receive a medium sized version of Item 1 (271). The user has also selected to receive Item 2 (272) and has chosen to receive (289) a light
25 version (282) of item 2 (272). It should be clear that the attributes provided may be

dependent on the type of good or service offered. To provide some examples, which are not all inclusive, if an item was a hamburger such attributes as toppings (for example, cheese, lettuce, tomato, pickles, onion, ketchup, sauce, or bun), cooking level (rare, medium, well-done), and size (single, double, quarter-pounder) could be provided. In addition, sub-attributes could be provided. For instance, if the user selects to have cheese, a second selection for a type of cheese (American, Cheddar, Monterey Jack) could be provided. These sub-attributes could also be provided as part of the template allowing for virtually any collection of offerings that the provider is willing to provide. To get outside the food service arena, it is also clear that attributes could be provided for any good. A clothing item could have the attributes of color, size, fabric, brand name, or others. Services could also have attributes such as time, duration, requested servicer, etc. It should be clear to one of skill in the art that the only limitation on what could appear as attributes is limited only by the type of item on the menu and the imagination and willingness of the provider to provide. In addition, in the provider's menu template (207) the attributes are shown with fixed entries which are selected by the user. These fixed entries may be desirable to provide a limited universe of selections but in an alternative embodiment of the invention, blank fields could be provided that the user could fill in. These fields could allow virtually limitless selection options for the user, allowing him to type in whatever he desires.

Attributes need not be limited to textual statements but could instead provide thumbnail sketches or other representations. The system could also select the actual good to be provided based on multiple attribute entries. As an example, let us use the purchase of coffee. Coffee can be provided in a multiplicity of cup sizes. Coffee can also have different amounts of cream or milk added to make the coffee a particular

color. Instead of asking the user how much cream to place in their coffee, the system could have a color guide showing pictures or other representations of many popular colors. The user could then select the appropriate color and cup size. With both these selections, the system could then translate the user's selection into what is required in the preparation. For instance the user's selection of a large coffee in the third color grade could be provided to the provider as large with 0.6 ounces of cream, while a small in the third color grade could be provided as small with 0.3 ounces of cream. These coffees being the same net color due to the ratio of coffee vs. cream. Such a system can make the order more intuitive to the user, while ensuring the provider provides exactly the desired product.

This translation of what is understood by the user to what is actually seen by the provider exists in one embodiment of the invention and goes beyond merely allowing a customer to interrelate attributes. The system could translate from a user understandable code (for example: hamburger with lettuce, tomato, and no onion) to a code usable by the food preparer and expected by the food preparer (for example H: L,T,Θ~~n~~). In this way, the user can be insured that the food preparer sees the order displayed as they would expect the order to be displayed with the user's desired order and there is less chance of the order being misheard by a cashier, misentered into the system, or translated incorrectly. As part of this translation, it may be necessary for the information processing system (333) to even translate between different computer languages or operating systems to allow presentation of the order on the presentation system of the food preparer.

To return to FIG. 3, once the user has finished filling out the templates or otherwise providing information for the profile (209), the information is stored in a profile (209) which is sent to the information processing system (333). The

information processing system (333) will then store the profile on some storage device whether local to the information processing system or on another network or system.

On the information processing system (333), the storage would generally take place in a database (337) such as, but not limited to, a relational database, an object database,

5 or any other type of database known in the art. It can also be any other type of storage medium known to the art.

In order to allow for quick retrieval of the profile (209), the profile (209) may be sorted with some unique identifier (213) to identify that profile (209). This unique identifier may be based on information entered in the profile (209) (such as the value
10 in the name field (251)) or could be an assigned identifier placed according to some determination when the profile (209) is created. Systems for identifying data, such as the profile, for later retrieval are well known to the art and any method could be used. Here the unique identifier (213) is a unique number assigned to the profile by the system.

15 The user will then be provided with some method of accessing the profile identified by this unique identifier, generally by being provided with some type of entry identifier which makes reference to the unique identifier or is the unique identifier. One example of an entry identifier is provided as part of FIG. 5. FIG. 5 shows a tangible frequent buyer card including a plastic or other durable card (501)
20 imprinted with a figure (503) depicting the use of the card (in particular that this is a Big Burger Corp. Meal X-press card). The card also has a printout of the user's name (505) and a barcode (506) which is the user's entry identifier and from which the user's profile can be retrieved. FIG. 5 includes a single example of an entry identifier and an entry identifier may be, but are not limited to, alphabetic, numeric or
25 alphanumeric codes; scannable or machine-readable codes such as bar codes,

magnetic codes, or digital signatures; biometric identifiers such as voice identification or fingerprint identification; or any combination of entry identifiers. The entry identifier may be provided to the user in such a way that the entry identifier could be verbally communicated to the provider or entered by the user or the provider into a data entry device, for example the user could remember the entry identifier or provide a suitable body part for a biometric scan. The entry identifier may also be provided to the user in some tangible single use or reusable form as shown in FIG 5 such as a card, tag, sticker, printed page, or any other tangible form, which tangible form can be provided to the provider or presented to data-entry equipment provided for this purpose. The entry identifier could also be provided internal to a machine and stored by a user on any electrical or mechanical machine, such as but not limited to, a computing device, a PDA, a cellular telephone, a watch, a device specifically built for the purpose of maintaining the entry identifier, or any other type of device

FIG. 4 shows an example of the system working in a QSR to complete a transaction. In the system, the user (401) arrives at the restaurant and presents their entry identifier (403) to the data entry point. In this case, the entry identifier (403) is a bar code printed on a plastic card (404) that is presented to a bar code reader (405). The bar code reader (405) then contacts the information processing system (333) where the user's profile (209) is stored. The information processing system (333) then contacts an authorization system (335) which approves the transaction and charges the user's account that was provided in the profile. The profile (209) is retrieved and is translated into an order readable by a presentation device (373) to be presented to the food preparer (not shown). The order appears to the food preparer (not shown) on the presentation device (373) allowing the food preparer (not shown) to prepare the order and a product (415) is made available to the user (301) for

immediate pickup. The user (301) therefore simply retrieves their profile and bypasses any lines waiting to order and instead goes directly to the order pickup area to receive the order which is already being prepared.

While the invention has been disclosed in connection with the preferred
5 embodiments shown and described in detail, various modifications and improvements thereon will become readily apparent to those skilled in the art. Accordingly, the spirit and scope of the present invention is defined only by the following claims.

Claim(s)

1. A method for performing a transaction comprising:
storing, on a storage device, a profile generated by a user;
permitting said user to retrieve said profile;
5 transmitting at least a portion of said profile, from said storage device, to a
provider, such that said portion bypasses presentation to said user; and
completing a transaction between said user and said provider based on said
portion.
- 10 2. The method of claim 1, wherein, in the step of storing, said storage device
includes a database.
3. The method of claim 1, wherein, in the step of storing, said profile includes an
order.
4. The method of claim 1, wherein, in the step of storing, said profile includes
15 payment information.
5. The method of claim 1, wherein, in the step of storing, the profile generated by
the user is generated over a network.
6. The method of claim 5, wherein said network is the Internet.
7. The method of claim 5, wherein said network is the World Wide Web.
- 20 8. The method of claim 1, wherein, in the step of storing, the profile generated by
the user is generated using audio communication.
9. The method of claim 8, wherein said audio communication is transmitted via a
telephony device.
10. The method of claim 1, wherein, in the step of storing, the profile generated by
25 the user is generated on a hardcopy.
11. The method of claim 10, wherein said profile is transmitted to said storage
device
12. A system for performing a transaction comprising:
means for storing a profile generated by a user;
30 means for retrieving said profile;

means for transmitting said profile to a provider, such that said profile bypasses presentation to a user.

13. A system for performing a transaction comprising:

5 a profile generated by a user and stored on a storage device, said profile having a unique identifier and including an order;

an information retrieval system capable of retrieving said profile from said storage device;

a data entry device for accepting input data said input data being associated with said unique identifier; and

10 a presentation device for displaying said order from said information retrieval system;

wherein said information retrieval system bypasses presentation of said profile to said user when said order is transmitted to said presentation device.

14. The system of claim 13, wherein said information retrieval system includes a computing device.

15 15. The system of claim 13, wherein said data entry device includes one of: a computing device, a personal digital assistant (PDA), a wireless transmitter, a wireless receiver, a bar code scanner, a voice recognition system, a fingerprint recognition system, a magnetic card reader, a smart card reader, a numerical key entry system, an alphabetic key entry system; an alphanumeric key entry system, a wireless phone, a landline phone, a text recognition system, a touch screen, a pointing device, a sound sensor, or light sensor.

16. The system of claim 13, wherein said input data includes an entry identifier.

17. The system of claim 16, wherein said entry identifier includes one of: an alphabetic code, a numeric code, an alphanumeric code, a scannable code, a machine-readable code, a bar code, a magnetic code, a digital signature, a voice identification, or a fingerprint identification.

18. The system of claim 16, wherein said entry identifier is provided in a tangible form.

19. The system of claim 18, wherein said tangible form includes one of: a card, a tag, a sticker, or a printed page.

20. The system of claim 16, wherein the entry identifier is provided in a form that can be stored on a device that includes one of: a mechanical device or an electrical device.

5

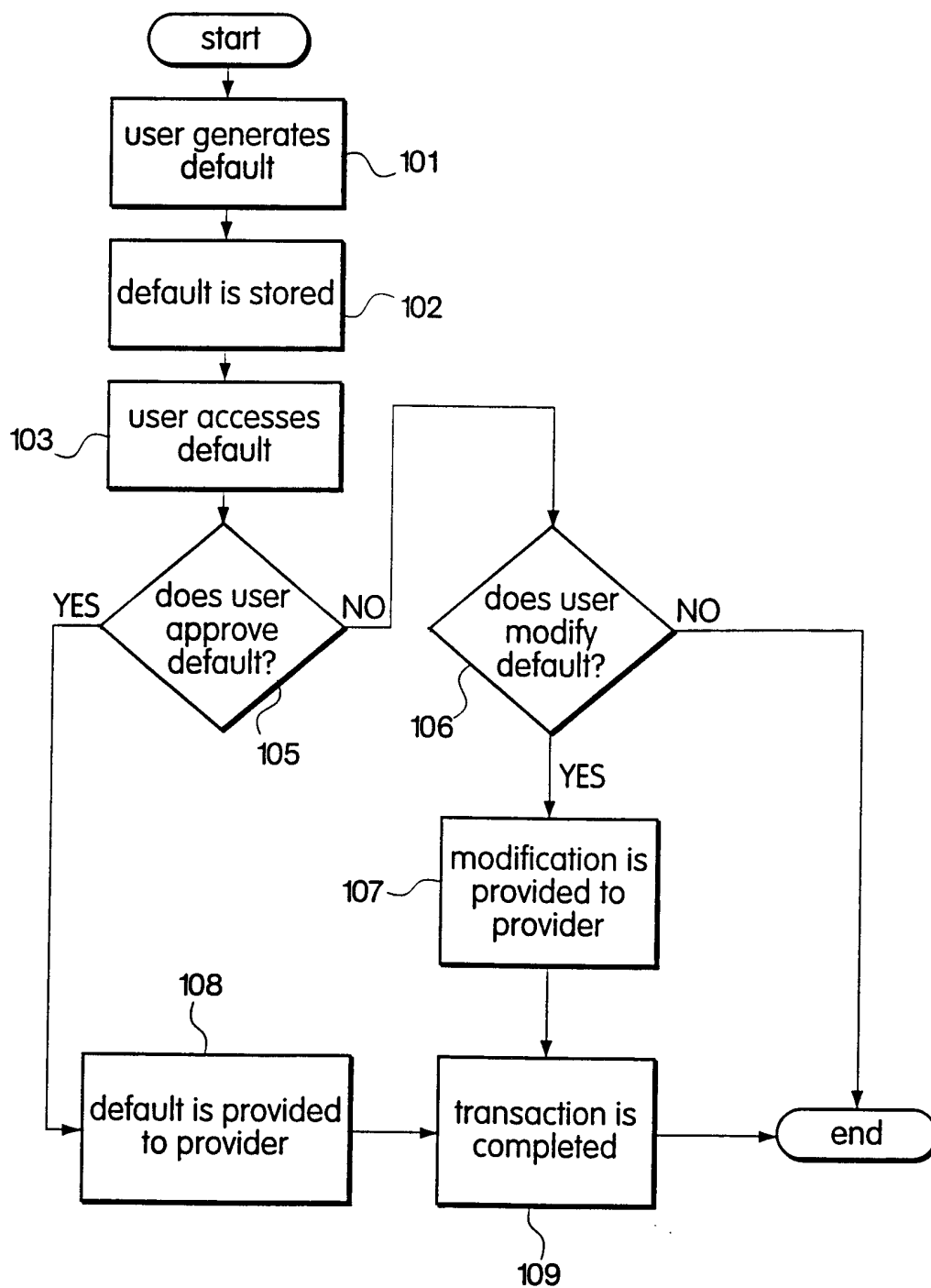


Fig. 1A

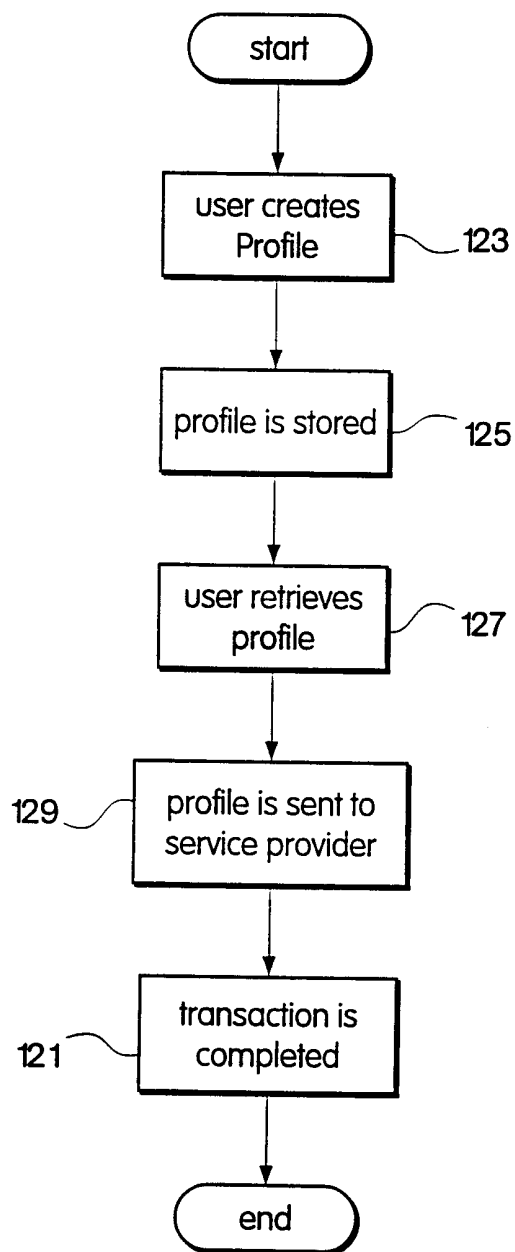


Fig. 1B

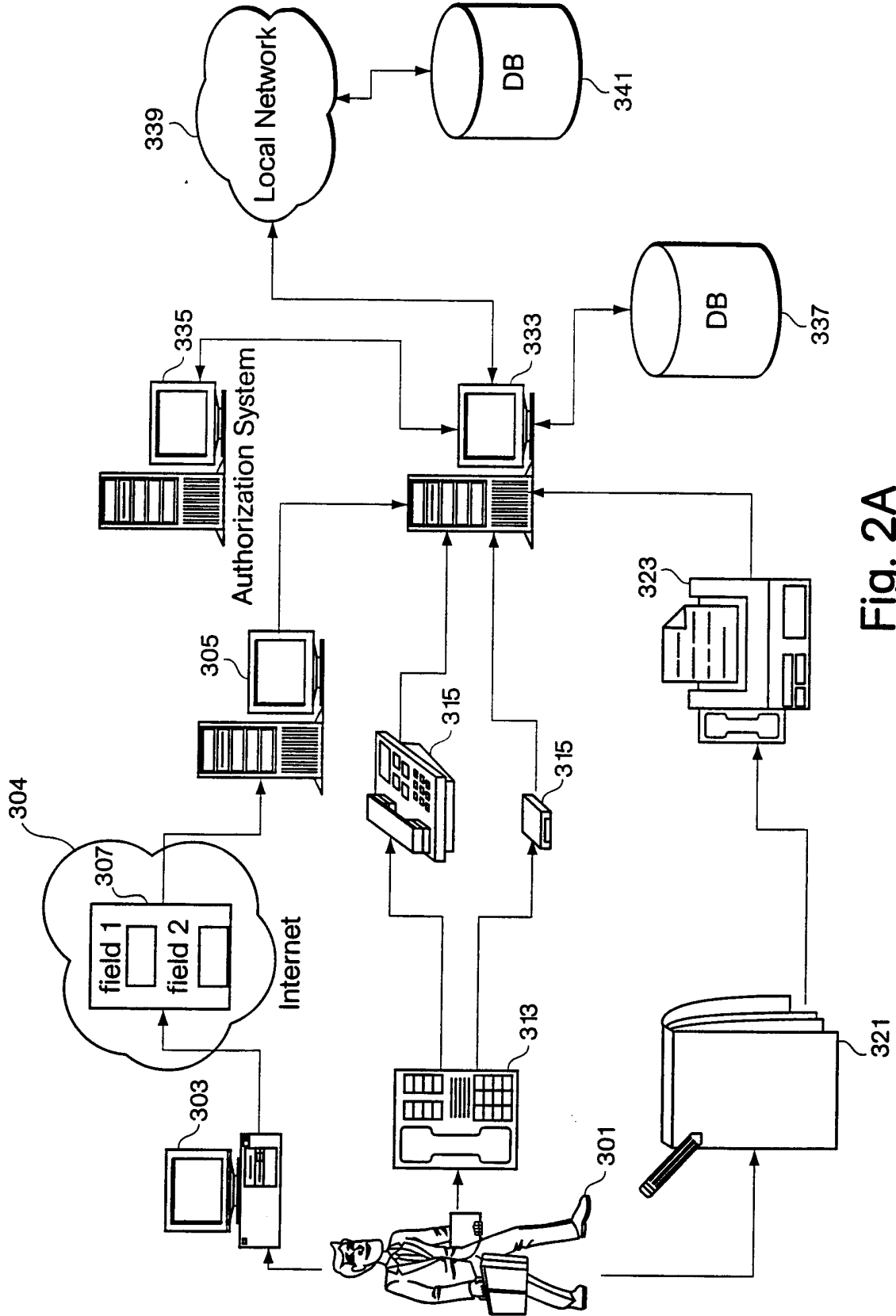


Fig. 2A

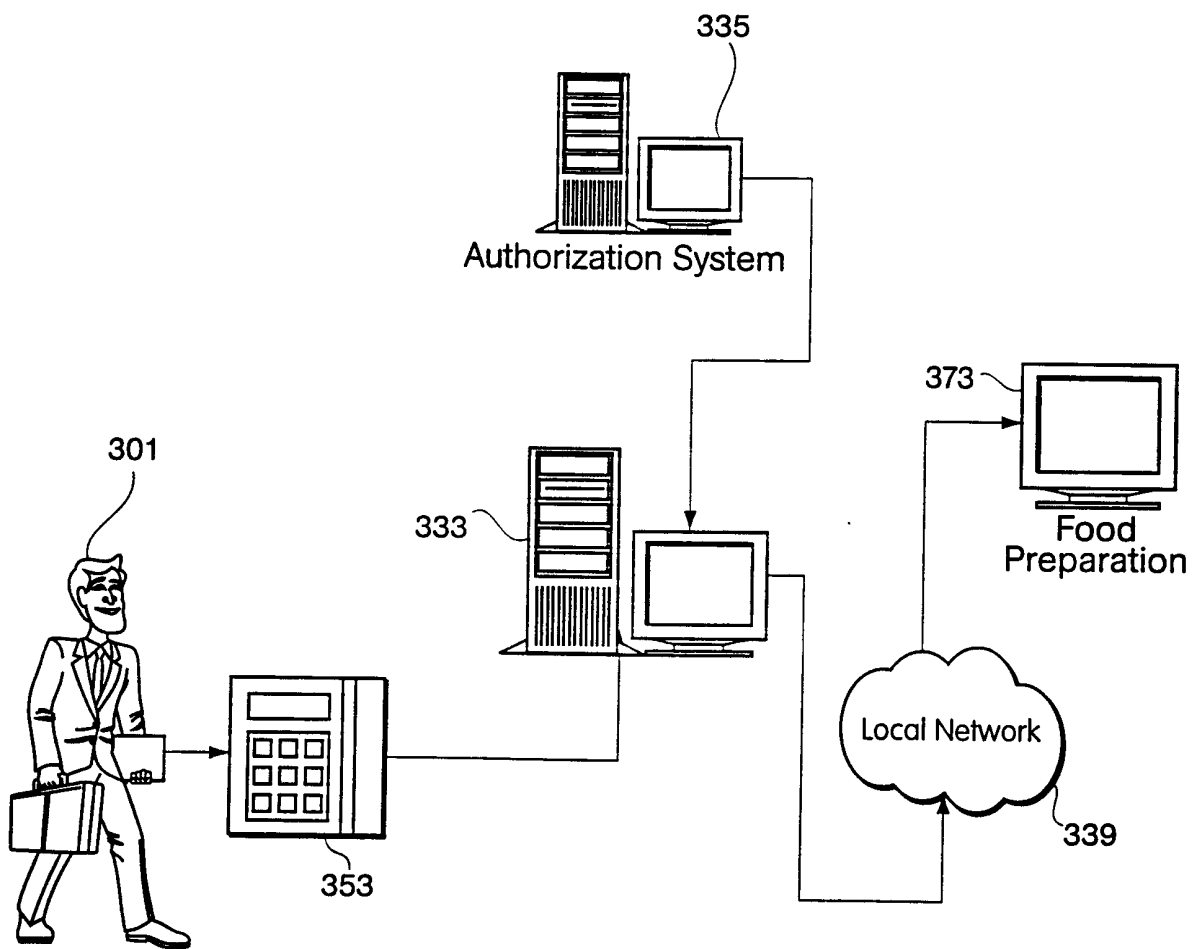


Fig. 2B

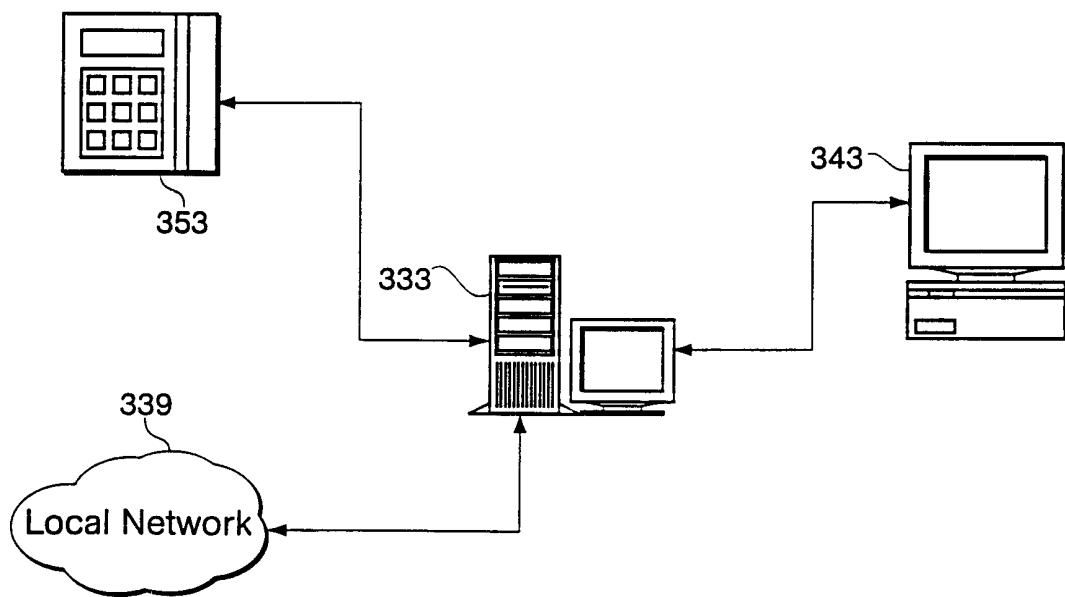


Fig. 2C

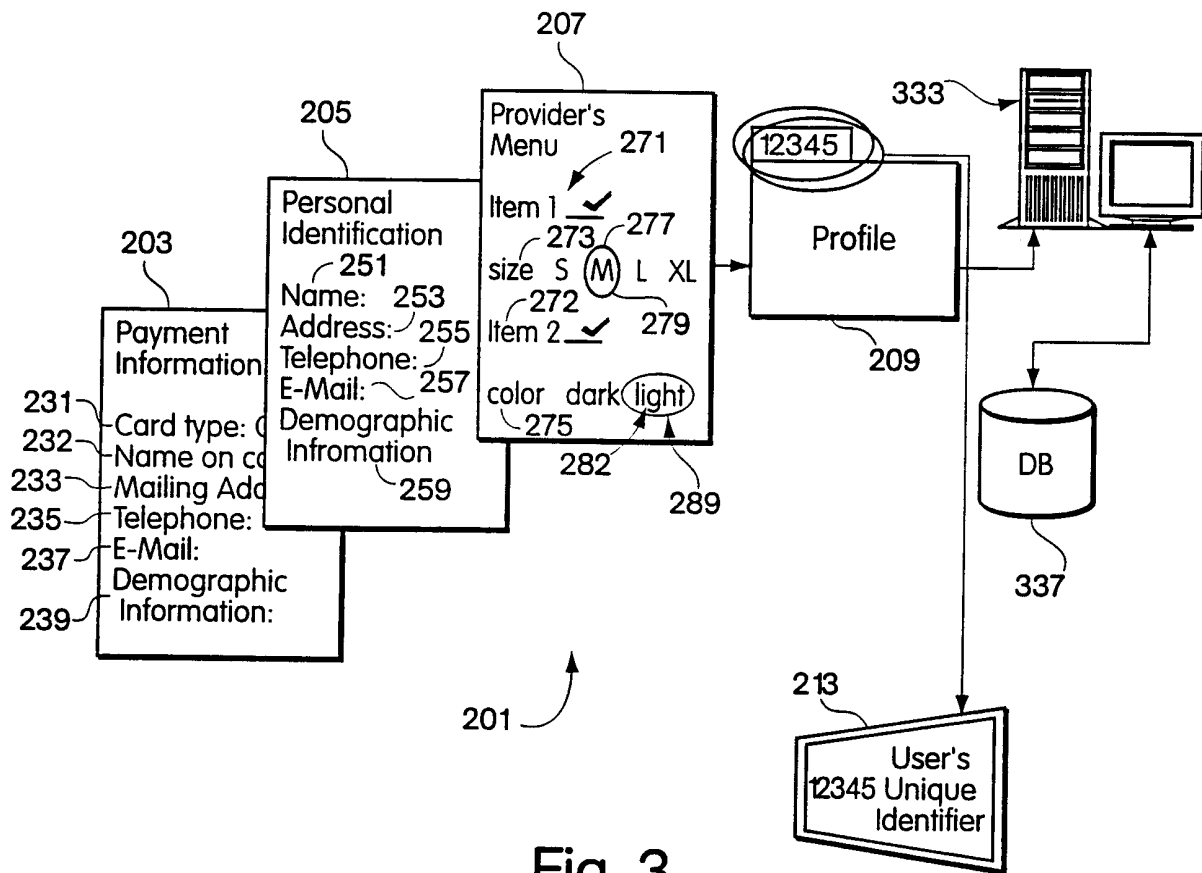


Fig. 3

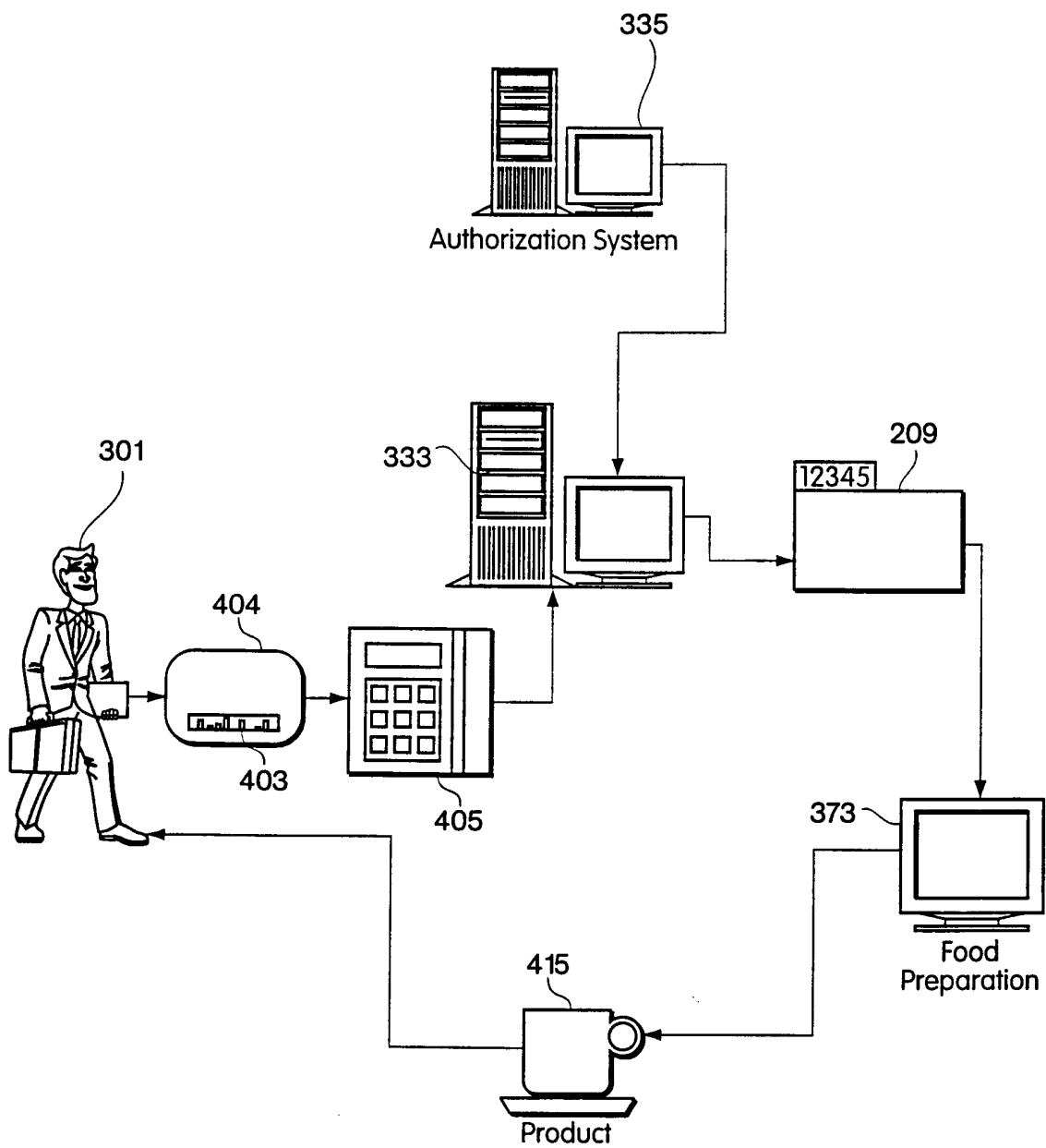


Fig. 4

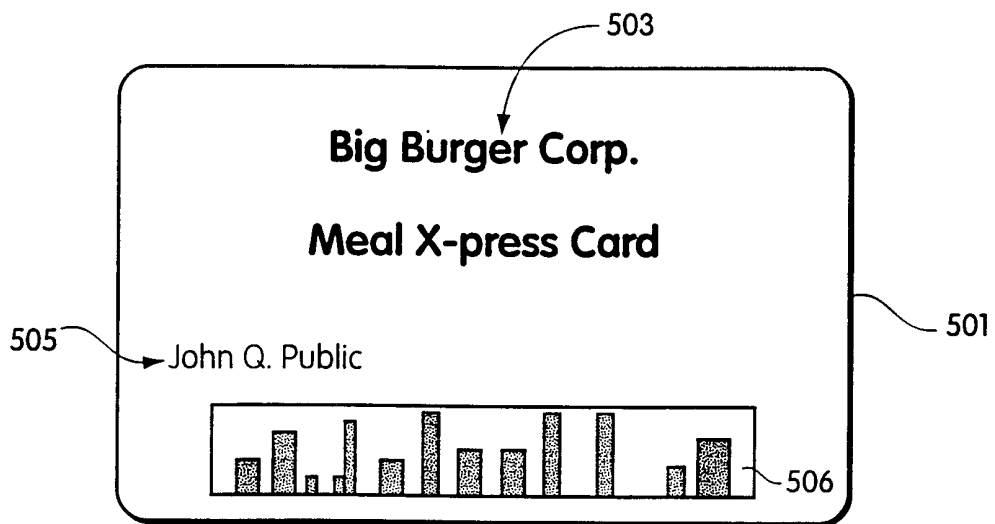


Fig. 5