The present invention is directed to a donation collection and processing system. The donation collection and processing system includes a virtual fundraising device that is located in a commercial establishment. The virtual fundraising device is a compact electronic device that prompts the customer to return as a donation to a donee a portion of their change as a result of a sales transaction. The virtual fundraising device is therefore electronically linked to and in proximity with an electronic cash register. The system also includes a donation collection server that is itself in a separate location but is in electronic communication with the virtual fundraising device. An electronic database is electronically linked to the donation collection server and stores data on donation transactions coming from one or more virtual fundraising devices. Finally, in Internet web server that includes a website is electronically linked to the database such that visitors of the website can electronically access, view, and enter data into the database. The server also preferably enables the customer to select a donee or donees for donations previously or prospectively made at commercial establishments.
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SPECIFICATION

METHOD AND SYSTEM FOR RECEIVING AND PROCESSING DONATIONS OUT OF THE CHANGE DUE FROM A PURCHASE

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention pertains to the field of electronic donating, and more particularly to the fields of electronic donating at cash registers and the digital communications and administration of data involving such donations.

2. Background

Many devices and systems for allowing individuals the opportunity to donate their change from a sales transaction to non-profit organizations supporting various causes are in existence. One of the simplest donation prompters is the change box at the grocery store cash register, which has been a staple of donation collection for many years. Several problems however, are associated with the use of such systems and methods.

First, these methods rely on the store customer or patron independently noticing the donation container. With the increasing number of items on display at the typical cash register, all vying for the attention of the customer, a
solitary donation collection container is easily missed by the customer.

Second, the conventional donation prompters, i.e. simple containers, require that the customer physically take the coins or paper currency from their person and place it in the donation collection container. For a number of reasons, under such conditions, the patron may opt to refrain from making a donation. For example, the placement may require too much time. In the hurried pace with which many commercial establishments attend to customers' purchases, the added step of making a donation can prolong the time taken by each customer at the point of sale. The prolonged handling of change to make a donation can be frustrating to establishment owners, cashiers and any other customers who are waiting to make their own purchases.

Third, once the money is actually in the customer's hands, the customer may be more reluctant to part with his/her money. The customer may find that it is easier to simply return the coins or paper currency to a pocket or purse. Finally, reluctance to donate may stem from a desire not to draw the attention of others nearby. The act of donating at the cash register of a commercial establishment is not a particularly private matter as some potential donors may prefer it to be. In
fact, the act can be a noisy, attention-drawing one when change is dropped into a donation container.

Fourth, such devices rely heavily on human handling of the donated funds. The coins and bills placed in the containers must be counted, record logs must be maintained, and the amounts received must be transported and accounted for. Advancements in the automated counting of currency, like the development of coin counting systems by COINSTAR INC., may limit to some extent human handling of donations, but even if such systems are used, the potential for human error and/or theft is not eliminated. Consumers who are aware of the potential for mishandling and theft may be reluctant to donate their change via such containers solely on the basis of the potential loss or theft of the donation.

Fifth, a single container normally provides a means for donating to only one charity. Thus, multiple containers are necessary if more than one donee is to be represented at the point of sale. Also, even if more than one donation container is present, the customer is necessarily limited with respect to the choice of donees. Thus, even if inclined to make a donation, the customer may opt to decline based on the unattractiveness of the choice of donees available.

Finally, these containers are often too bulky or cumbersome to be proximately placed at the point where purchases
of goods or services take place. Conversely, when they are so positioned, such containers are sometimes too small to hold any significant collection amount and therefore usually require repeated maintenance.

Historically, efforts to automate much of the process of collecting donations from commercial establishments have met with little commercial success. Prior patents however suggest that a number of systems and methods have been developed. See U.S. Patent No. 5,621,640 issued to Burke, U.S. Patent Nos. 5,546,303, 5,546,518 and 5,555,497 issued to Helbling, and U.S. Patent Nos. 5,663,547, 5,506,393, and 5,696,366 issued to Ziarino.

In Patent No. 5,621,640 issued to Burke, an electronic donation prompting system is disclosed in which donations based on change to be received are recorded using a donor card having a donor card number that the customer possesses. All or a portion of the change to be received from a transaction can be donated and credited to the patron via the donor card identification.

In the U.S. patents 5,546,303, 5,546,518 and 5,555,497 issued to Helbling, an electronic donation-prompting system is described in which commercial establishments are data-linked to a central location that coordinates and accounts for donations electronically placed based on change each patron is to receive.
A select/display panel allows the patron to enter the charity to which the contribution will go. Totals for each establishment are tabulated at the points of sale.

The U.S. patents 5,663,547 and 5,696,366 issued to Ziarno, disclose an electronic donation-prompting system for inducing contributions at fundraising-type events. The patents describe electronic contribution terminals that are dispersed to prospective contributors. These terminals enable electronic entry of donations and the offloading of the electronic donations onto a separate remote terminal.

Finally, U.S. patent 5,506,393, also issued to Ziarno, describes a method of making donations electronically using a credit and/or debit card.

The above patents describe donation systems that are suitable for particular contexts of donation making. However, none of these systems are adequately tailored to the specific circumstance where donations are made contemporaneous to a currency-based transaction, and where donation efficiency, inducement to donate and direction to further information and services are achieved objectives. While the Burke patent and the patent 5,506,393 to Ziarno are applicable to the sales transaction context, they require the use and handling of an added element: a donor or credit card. By having another item that the customer must handle in order to make a donation,
efficiency in the donation process is seriously compromised. Also, the patents do not describe a system that induces continued customer involvement and incorporates additional services that can be accessed at the customer’s convenience while still minimizing the inconvenience at the point-of-sale. Thus, the patents generally do not provide for a donation system in a sales transaction context that is small enough to not interfere with the usual fast-pace of transacting that occurs in this environment. Thus, a need exists for a system and method of donating in a sales transaction environment that solves the above-described issues.

SUMMARY OF THE INVENTION

The present invention is directed to a donation collection and processing system meeting the objectives of efficiency in a sales transaction environment, physical compactness, absence of physical items to be handled by the customer and cashier alike, inducement to repeatedly donate, and inducement to seek further information. The system includes a virtual fundraising device (VFD) that is located in a commercial establishment. The VFD is a compact, non-intrusive electronic device that is electronically linked and in proximity to an electronic cash register. The system also includes a donation collection server that is positioned in a separate location but is in electronic
communication with the VFD and electronic cash register. An electronic database is electronically connected to the donation collection server and stores data on donation transactions coming from one or more VFDs. Finally, an Internet web server and associated website with domain name is electronically connected to the database such that Internet visitors of the website can electronically access, view, and enter data into the database.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a diagram of a preferred embodiment of the fundraising system of the present invention.

FIG. 2A is a diagram of a first preferred embodiment of the virtual fundraising device sub-system of the fundraising system of the present invention.

FIG. 2B is a diagram of a second preferred embodiment of the virtual fundraising device sub-system of the fundraising system of the present invention.

FIG. 3 is a diagram of a preferred embodiment of the donation collection, recording and distribution sub-system of the present invention.

FIG. 4 is a diagram of the preferred fields in the database of the donation collection, recording and distribution sub-system.
FIG. 5 is a functional flow diagram of a preferred embodiment of the method of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The present invention is directed to an electrical and electronic communication system for enabling customers at a commercial establishment or point-of-sale to donate their change to non-profit organizations, including charities, of their choice. The system encompasses a means for enabling a customer to record and track their donations while exposing the customer to a variety of other services and benefits.

As shown in FIG. 1, there are two main electronic components to the system. The first component, a virtual fundraising device (VFD) 100a, is preferably integrated with an electronic cash register 102a at the point of sale of a service or product. The VFD 100a is a specific electronic form of a donation prompter as is commonly observed in the art and appears in the sales transaction environment. The combined VFD/electronic cash register sub-system (hereafter "VFD subsystem") 104a is electronically linked to a collection server 106 that is part of an overall donation distribution and recording subsystem (DDRS) 108, preferably at a location different from the VFD subsystem 104a. The electronic link between the collection server 106 and the DDSR 108 is preferably
in the form of a land-line or cellular telephone. Preferably, a VFD 100a, 100b, ...100N is electronically connected to each electronic cash register 102a, 102b, 102N in a commercial establishment. Thus, one establishment can have many VFD subsystems 104a, 104b, ...104N, all linked to the same collection server 106. Moreover, a single collection server 106 preferably is linked to the VFD subsystems 104a, 104b, ...104N of many if not all establishments so equipped.

A preferred embodiment of the VFD/customer interface 200 is shown in FIG. 2A. The face of the VFD 200 is preferably a bright color to attract the attention of customers approaching the cash register 102. In the figure, the words "Will you please donate" are preferably provided at the top indicating the first clause of a request for a donation. Preferably, just below the text is an LCD display 201 that indicates a suggested donation amount. Preferably, the amount indicated is the amount of change to be returned to the customer as a result of a transaction that must consist of coinage, that is, pennies, nickels, dimes and quarters. For example, if the change to be returned is $1.43, the amount displayed on the LCD display 201 would be 43 cents. Alternatively, the amount displayed is the amount of coinage due excluding any currency to be returned that is greater than or equal to quarters of a dollar. In this case, using the above example, the LCD display 201 would display 18
cents. As another alternative, the display would show both amounts, that is, 43 cents and 18 cents, as two amounts for the customer to choose from.

Below the LCD display 201, the text of the donation request preferably continues with "pennies to," below which is preferably a second display 202 indicating a particular donee or charity to which any donation is sent. The donee indicated can be selected by the commercial establishment and alternatively may serve as a default donee if the customer, either before or after the donation transaction, does not select a donee of the customer's own choosing. The selection of the donee by the customer is preferably performed by addressing the domain name of a donation administration website to be described. Thus, for example, the complete request might read "Will you please donate 2 pennies to The Ronald McDonald House." Below the donee's name are preferably two depressable buttons 204, 206. One button is a donation affirmation button 204 on which are preferably the words "YES: ALL COINS" and on the other button is a donation disaffirmation button 206 on which is preferably the word "NO."

In another alternative embodiment, a third depressable button 205 is preferably positioned between the first two buttons 204, 206. This third button is a donation affirmation button on which are preferably the words "YES: DIMES, NICKELS AND PENNIES ONLY." These depressable buttons serve as an electronic
selection mechanism that is easily used by a customer at a cash register. Other mechanisms of electronic selection that have a comparable ease of use like a touch screen or electronic mouse may also be applied.

The customer, either on his/her own initiative or by a prompt from the cashier, presses one of the three buttons 204, 205, 206 as an answer to the donation request. If the customer presses a "YES" button 204, 205, a receipt from a receipt dispenser 208 is preferably provided indicating the selected donation amount that was indicated on the LCD display 201, a donation transaction number preferably in the form of an alphanumeric character string, and preferably, the time of the transaction. In a first optional embodiment, the sales transaction receipt from the electronic cash register 102 includes all of the donation transaction information, thus incorporating the two transactions, that is, the sale and the donation, on one receipt. In an alternative embodiment, a receipt is provided from the receipt dispenser 208 only if the donation is above a specified amount like, for example, 25 cents. In an optional embodiment, the customer is prompted, preferably via a message on the LCD display 201, to press the same "YES" button 204, 205 a second time to verify the intent to make a donation. The VFD 100a, 100b, 100N then preferably communicates the donation to the electronic cash register 102a,
102b, 102N so that the cashier is informed that some amount less than the total initial change is to be returned to the patron. Alternatively, a second display on the VFD 100a, 100b,...100N (not shown in FIG. 2A) which is viewable by the cashier, displays the amount of change to be returned to the customer after subtracting the customer-selected donation amount. The VFD 100a, 100b,...100N and/or the electronic cash register 102a, 102b, 102N preferably records the donation for purposes of the establishment's records, and maintains the running total of the amount of donations collected at that particular VFD/cash subsystem 104a, 104b, 104N.

Systems for capturing and securely storing financial transaction data of this kind are known in the art, as seen for example in the modular transaction terminals produced by PenWare™. At the time of data recording or at a predetermined time after the transaction, the donation transaction is communicated to the collection server 106. If the patron presses the "NO" button 206, then the VFD 100a, 100b, 100N communicates to the electronic cash register register 102a, 102b, 102N that the change from the transaction should be returned to the customer. When the "NO" button 206 is pressed then a separate receipt is not provided to the customer by the receipt dispenser 208.
The VFD 100 preferably includes several basic internal components to operate the fundamental aspects of the VFD 100, that is, the VFD interface 200 and the transfer of data to and from the electronic cash register and to the collection server 106. The VFD includes an input port, which receives data from an electronic cash register 102 on the initial amount of change to be returned to a customer. Processing the data via the input port, the VFD 100 also includes an arithmetic logic unit that calculates the number of pennies that must be included in the initial amount of change to be returned to the customer. The VFD 100 preferably also has an output port, that is connected to the arithmetic logic unit and transmits to the electronic cash register 102 data on the final amount of change to be returned to the customer. Preferably, a processing unit drives the display interface including the "YES" and "NO" buttons 204, 205, 206, the donation display panel and the receipt dispenser, and accumulates identifying data on the donation. Finally, the VFD 100 preferably also includes a network port that is electronically connected to the processing unit and, in response to the making of a donation, transmits to a preferably distant location, data on the calculated number of pennies and any data identifying the particular donation.

An alternative embodiment VFD interface 220 appears in FIG. 2B. In this embodiment, an LCD display 222 preferably
includes a color touch screen to enter keys 224, a donee key 226, and receipt dispenser 232. This embodiment is more complex, but possesses more options for the customer than the interface 200 shown in FIG. 2A. For example, the display/touch screen 222 of the VFD 220 of FIG. 2B preferably allows the patron to select any donation amount less than or equal to the change to be returned. The display/touch screen also preferably allows the patron to select a particular charity using a donee key 226 on the face of the VFD 220. The donee key 226 preferably includes a selected list of charities 228 and corresponding numeric identifiers 230 used for entry on the touch screen 222. Preferably, the donee key 226 lists non-profit organizations and charities that are nationally known recognized and trusted to initially attract customers to this method of donating. Optionally, the display/touch screen 222 allows entry of a numeric identifier of the customer/donor. If the customer already possesses an account stored in the collection server 106, the customer account identifier can facilitate the process of crediting the customer with the donation made at the establishment. The touch screen 222 may be any touch screen interface as is known in the art and used at various establishments including banks that provide automated teller machines. An example of such a touch screen is the TOUCHTEK™ Resistive Touchscreen produced by MicroTouch™.
In accordance with these optional forms of numeric entry, the display panel 222 of the VFD preferably provides a prompt to input an entry number corresponding to a charitable organization as shown on the donee key 226. Preferably, once the prompt is provided, the customer then chooses a charitable organization to which his/her change is donated by inputting the entry number corresponding to the organization of his/her choice. Preferably, if no choice is selected, the display panel 222 provides a prompt to the customer to enter a customer identifier or identification number. If an identification number corresponding to the particular customer is input without a specified donee, then the financial transaction is preferably sent to the collection server 106 with a default donee. However, by including the customer identifier, the default donee may preferably be modified based on account information previously provided by the customer. In particular, this account information may include other donees preferred by the customer.

The display panel 222 preferably further provides informative text for the customer. The text may, for example, describe a location in the establishment where information regarding the administration of the donated funds may be obtained. This information preferably is in the form of a brochure that, among other things, provides the name of the
administrative organization, its telephone number, correspondence address and/or website domain name. Alternatively, the display panel 222 directly informs the customer of the website domain name of the administrative organization of the donated funds where further information can be obtained.

Finally, the alternative VFD 220 may optionally include an infrared, optical or other electromagnetic sensor 234 that would allow the customer to enter customer identification and/or donee information via a bar-coded or smart card or a hand-held computer/transceiver device like the Palm III™ made by 3Com/Palm Computing Inc.

In FIG. 3, a donation distribution and recording subsystem (DDRS) 300, preferably positioned at a location away from any commercial establishment, receives donation transaction information from a network of one or more VFDs 100. The DDRS 300 preferably includes a collection server 106, 304 as discussed above, a donation/customer electronic database 306, a donee advertising database 308 and an internet interface server 310a and associated protected website 310b. The internet interface server 310a is preferably electronically linked to the Internet by having an internet address accessible using a commonplace external computer with modem. The interface server 310a preferably offers standard programs like MYYAHOO™ that
individuals can download onto their personal computers. The software is designed to allow website 310b visitors to choose, save and update particular channels or points of interest. The collection server 304 electronically receives the donation transactions recorded and sent by a VFD 100. The electronic communication, preferably via land-line or cellular modem using systems and software designed for electronic communications and commerce, can take place immediately upon the completion of a donation transaction or at one or more predetermined times during the business day or week. If the latter, the communication consists of all donation transactions completed since the last electronic communication.

Once the collection server 304 receives the donation information, the data from the transaction or transactions are stored in the donation/customer electronic database 306 and indexed according to the data fields included in the transaction data. For example, if the data transaction included only a donation amount, establishment identifier and transaction identifier, then the data is preferably indexed with both identifiers. If a customer identifier is included in the transaction data, then that data is also indexed by the customer’s name in the electronic database 306.

One indexing use of the electronic database 306 is exemplified when, alternatively, no donee is named in the
transaction data. In such a case the collection server 304 can reference the customer's preferences in the database 306 using the identifier provided in the transaction data. The collection server 304 then identifies the donees previously named by the customer as preferred donees. The donees specified in the database 306 thereby become the donation recipients.

The collection server alternatively also calculates transaction fees to be subtracted from the donation in calculating the amounts to be sent to the donees. From the data stored in the database, receivables from the commercial establishments as well as billables for the donees are produced so that invoices and checks respectively can be subsequently distributed.

FIG. 4 presents a preferred embodiment of the data fields organized in the donation/customer database 306. In one embodiment, only some of the fields in the database 306 as shown in FIG. 4 are collected and stored. Alternatively, a comprehensive set of fields relating to customer information is included in the database 306. In this alternative embodiment, the ability to provide customer donation accounts is enabled. Potentially, customers can establish and/or access such accounts, enabling them to enter personal information and donation preferences, while the database 306 provides comprehensive records of their donation portfolio. Potentially,
in another alternative embodiment, customers with accounts who have expressed donation preferences in the database 306 can have default donees that are specified at the commercial establishments overridden by the preferred donee or donees expressed in the customers' account file. Thus, preferably, the donation customer database 306 is a secure database preferably requiring passwords to enable access. Special passwords exist for the administration of the DDRS 300 and preferably more limited customer-specific passwords are in place for the customers who wish to access their accounts.

The Internet interface and website 310a, 310b serves both customers and donees. For customers, the website 310b preferably provides customers the opportunity to establish donation accounts by completing various personal profile fields of information, like those listed under “CUSTOMER PERSONAL INFO” in FIG. 4, and provides information on current and cumulative donation activities. Preferably, donation accounts are established after a customer has made a donation at a commercial establishment. The database 306 preferably has security locks that allow access only to authorized personnel and customers who desire to view their donation transactions. The database 306 preferably includes accessible information on the individual customer transactions, and cumulative donation totals for each donee specified.
Using the preferred embodiment of the VFD interface 200 of FIG. 2A, the donation data identifying the customer that is printed on the receipt is preferably entered by the customer as an initial method of identifying the website visitor as the customer who made the donation. The account is thereby established with the entered donation being the first donation credited to the customer. Preferably, the identification of the customer for subsequent donations is similarly performed on-line at the website 310b unless the account holder is already identified in the donation data sent to the DDRS 300. Donation accounts provide a secure and private method for customers to track and record their donations using the personal computer at home or work. Furthermore, these accounts are established with a consideration towards tax issues that could potentially benefit the customer.

In a preferred embodiment, the website 310b preferably provides customers one or more additional services and opportunities. Such additional services include but are not limited to the following: First, the website 310b provides customers the opportunity to make additional donations while on-line. On-line donation systems are known in the art and are currently provided by organizations such as eCHARGE™ Corp. with their eDONATE™ system. Preferably, the customer has a choice of making a donation immediately while the customer is on-line or
setting up a schedule of donations to be made by periodically charging the customer's credit card. Second, the website 310b includes links to other charities for those seeking further information about, wishing to contact, or become more involved with particular charities. Customers can monitor the usage of their donations and if they so choose, make changes to their list of preferred charities when subsequent donations are made. Third, the website 310b advertises promotions in which account holders and visitors may be eligible to receive gifts or win prizes. Eligibility for and/or rewards of gifts and prizes may be tied to the donation amounts a customer has made. In an alternative embodiment, visitors of the website can accumulate points, similar to the frequent flier points of most airlines, for time spent exploring the website. Points can also be accumulated for amounts actually donated to charities. These points, which are preferably stored as a separate field in individual accounts, can then be redeemed by the account holder claim rewards or become eligible for prizes. Finally, the website 310b provides customers and others with an arena or meeting place to discuss news, issues and concerns related to charities or non-profit organizations. For charities and others who service the non-profit sector, the website 310b provides an opportunity to advertise their causes and get feedback from donors. Preferably, a special donee and advertising database
308 is provided within the DDRS 300. A donee search engine is also preferably provided to enable customers to simply and easily identify and learn about other non-profit organizations and charities.

FIG. 5 is a flow chart showing a preferred embodiment of an inventive method of making a donation. The first step identifies that the context for the making of the donation is in a face-to-face sales transaction setting, like at the cash register of a commercial establishment. In FIG. 5 this step is:

CUSTOMER APPROACHES THE CASHIER OF AN ESTABLISHMENT TO PURCHASE A PRODUCT OR SERVICE 500. The next step is the performance of a purchase by the customer, preferably with currency and not some other method of payment. In the figure, this step is: CUSTOMER TRANSFERS CASH TO CASHIER TO PURCHASE PRODUCT OR SERVICE AND CASH AMOUNT IS ENTERED IN AN ELECTRONIC CASH REGISTER 502. Currency is preferably transferred by the customer to enhance the possibility that currency in the form of change will be returned to the customer. Thus, in the next step, the determination as to the change to be returned is made. In FIG. 5, this step is DOES THE CASH AMOUNT TRANSFERRED EXCEED THE PURCHASE PRICE? 504. If the answer is "NO" then the method is terminated. However, if the answer is "YES", then the method proceeds to the next step: EXCESS AMOUNT DUE IS COMMUNICATED TO THE CUSTOMER 506. Once the customer knows the amount of change
available to be returned, the customer decides whether to make a
donation. The next two steps of the method, which may appear in
any order, process this decision. In FIG. 5, the next step is:
CUSTOMER SPECIFIES A DONATION AMOUNT 508. Here, the customer
alternatively has the opportunity to specify any amount of the
change to be returned as is provided in the VFD of FIG. 2B or
preferably may be limited to a prescribed number of pennies to
donate as in the VFD interface 200 of FIG. 2A. The next step,
IS THE DONATION AMOUNT SPECIFIED NOT ZERO? 510, is a
determination as to whether a donation of any amount is being
made. If the answer is “NO,” then the step, EXCESS AMOUNT IS
RETURNED TO THE CUSTOMER 512 is taken and then the process is
terminated. If the answer is “YES,” then the step EXCESS AMOUNT
IS RECALCULATED AND RETURNED TO THE CUSTOMER 514 is performed.
Alternatively, in accordance with the VFD interface 220 of FIG.
2B, this step could include requesting an additional amount of
cash from the customer if the customer selects a donation amount
greater than the change that is due the customer from the
purchase. Also, optionally, before this step is performed, the
customer may enter a personal identification number referencing
a donation account held by a donation administration
organization. This optional step may further include specifying
a particular donee. These steps could be carried out using a
VFD 220 like that shown in FIG. 2B which allows for a numeric
customer identification entry using a touch screen 224 and numeric donee entry via a donee key 226.

At the same time or after the excess change is returned to the customer, information on the donation is recorded. In FIG. 5, this step is: DATA ON THE DONATION TRANSACTION IS ELECTRONICALLY RECORDED AND STORED AT THE ESTABLISHMENT 516. Such information is normally needed by the establishment to determine donation amounts to be periodically sent to the organization that administers the donation process. Preferably, the next step is to print a hard copy of the data on the transaction for the customer’s records. In FIG. 5, this step is: PRINT THE DATA ON A DONATION TRANSACTION RECEIPT AND PROVIDE TO THE CUSTOMER 518. The data is also preferably sent to a donation administrator of the donation process. This step is: SEND THE DATA TO A DONATION DISTRIBUTION AND RECORDING CENTER 520. Once the data is received at a centralized location, it is preferably stored for further processing. In the figure, this step is: STORE AND PROCESS THE TRANSACTION DATA AT THE DONATION DISTRIBUTION AND RECORDING CENTER 522.

Preferably, this center includes a DDRS 300 to enable an electronic receipt, electronic storage, and potentially, electronic processing and dispensation of the donation transaction data. Preferably, however, the processing step is performed manually by an accounting professional.
In the next step, the customer preferably accesses the donation distribution and recording center and thereby may specify changes or reaffirm the disposition of the donation made at the establishment. In FIG. 5, this step is: CUSTOMER ACCESSES THE DONATION DISTRIBUTION AND RECORDING CENTER VIA THE INTERNET AND SPECIFIES THE DISPOSITION OF THE DONATION TRANSACTION 524.

The last two steps in the method concern the actual handling of donated funds. In the first of the two final steps, the establishment that originally collected donations forwards the funds for distribution to the donation administration organization. This step is ESTABLISHMENT SENDS THE DONATIONS COLLECTED TO THE DONATION DISTRIBUTION AND RECORDING CENTER 526. Preferably, this step is performed electronically. Preferably, once the donations are received by the administrative organization, the donations are sent to the charities indicated by the establishment or the customer. This step is shown as SEND DONATION AMOUNTS TO SPECIFIED DONEES 528. Again this step is preferably performed electronically by sending payment to the bank that manages the donation accounts for the charity or non-profit organization. An optional step that would precede this final step is the exaction of an administrative fee for processing the donation. Once extracted, the balance of the donation remaining is forwarded to the charity named as the
donee. The last two steps in the method need only occur last chronologically where actual funds relating to the donation are transferred via the mail or electronically as a separate action. As an alternative embodiment of the method, the actual funds are transferred electronically as the transaction is completed. In such an embodiment these steps occur earlier in the method of steps.

Preferred embodiments of the present invention have thus been shown and described. It would be apparent to one of ordinary skill in the art however that numerous alterations and combinations of steps may be made to the embodiments herein disclosed without departing from the spirit or scope of the invention. Therefore, the invention is not to be limited except in accordance with the following claims and their equivalents.
What is claimed is:

1. A donation collection and processing system comprising:
   
   (a) a donation prompter, the donation prompter being located in a commercial establishment;
   
   (b) an electronic cash register, the electronic cash register being electronically linked and in proximity to the donation prompter;
   
   (c) a donation collection server, the donation collection server being in electronic communication with the donation prompter and configured to receive data on a plurality of donation transactions;
   
   (d) an electronic database, the database being electronically connected to the donation collection server and configured to store data on a plurality of donation transactions; and
   
   (e) an Internet web server having a website and electronically connected to the database such that visitors of the website can electronically access and enter data into the electronic database.
2. The donation collection and processing system of claim 1 further comprising a plurality of other donation prompters, wherein each of the plurality of other donation prompters is electronically connected to an electronic cash register and in electronic communication with the donation collection server.

3. The donation collection and processing system of claim 1, wherein the electronic communication between donation prompter and the donation collection server, the electronic connection between the donation collection server and the electronic database, and the electronic access of the visitors of the website to the electronic database are all secure links.

4. The donation collection and processing system of claim 1 further including a donee advertising database electronically connected to the website and providing electronic memory for electronic advertising.

5. The donation collection and processing system of claim 1, the website being configured to allow visitors to establish donation accounts.

6. The donation collection and processing system of claim 1, the website being configured to allow a visitor to modify the
donee named in a donation transaction in which the visitor is the donor.

7. The donation collection and processing system of claim 1, the donation prompter being a virtual fundraising device.

8. The donation collection and processing system of claim 7 further comprising a plurality of other virtual fundraising devices, wherein each of the plurality of other virtual fundraising devices is electronically connected to an electronic cash register and in electronic communication with the donation collection server.

9. The donation collection and processing system of claim 7, wherein the electronic communication between virtual fundraising device and the donation collection server, the electronic connection between the donation collection server and the electronic database, and the electronic access of the visitors of the website to the electronic database are all secure links.

10. A method of collecting and processing donations from customers at a commercial establishment comprising the steps of:
(a) receiving cash for a purchase from the customer at the cash register of the commercial establishment;
(b) determining the cash amount to be returned to the customer as a result of the purchase and communicating to the customer the cash amount to be returned;
(c) prompting the customer to specify a donation amount up to the cash amount to be returned;
(d) recalculating the cash amount to be returned based the donation amount specified by the customer;
(e) recording donation data in a data storage device at the commercial establishment and on a donation receipt that is provided to the customer;
(f) electronically transmitting the donation data to a donation administrator;
(g) electronically storing the donation data in the donation administrator;
(h) enabling electronic access by the customer to the donation data on the donation administrator such that the customer can provide additional data on the donation including specifying a particular donee; and
(i) transferring the donation from the commercial 
establishment to the specified donee via the 
donation administrator.

11. The method of claim 10, wherein step (i) comprises the 
steps of:

   (i1) sending the donation from the commercial 
establishment to the donation administrator; and 

   (i2) sending at least a portion of the donation from 
the donation administrator to the donee.

12. The method of claim 11, further comprising a step 
between steps (i1) and (i2) of subtracting from the donation 
received from the commercial establishment an administrative fee 
before sending the remainder of the donation to the donee.

13. The method of claim 10, wherein the customer’s choices 
of a donation amount comprise:

   (a) the coinage that must be included in the cash 
   amount to be returned, and 

   (b) no donation.
14. The method of claim 13, wherein the customer's choices further include the choice of the dimes, nickels and pennies that must be included in the cash amount to be returned.

15. The method of claim 10 further comprising a step, preceding step (e) of prompting the customer to electronically provide a personal identification character string.

16. The method of claim 10 further comprising a step, preceding step (e) of prompting the customer to electronically select a donee.

17. A virtual fundraising device for collecting as a donation at least a portion of the change to be returned to a customer as a result of a sales transaction comprising:

(a) an input port, wherein the input port receives data from an electronic cash register on the initial amount of change to be returned to a customer;

(b) an arithmetic logic unit, the arithmetic logic unit being electronically connected to the input port and configured to calculate the number of
pennies that must be included in the initial amount of change to be returned to the customer;

(c) a donation display panel, the donation display panel being electronically connected to the arithmetic logic unit to display the calculated number of pennies;

(d) an affirmation button, the affirmation button being adjacent to the donation display panel and electronically connected to the arithmetic logic unit such that if the affirmation button is activated the arithmetic logic unit calculates a final amount of change to be returned to the customer by subtracting the calculated number of pennies from the initial amount of change to be returned to the customer;

(e) a disaffirmation button, the disaffirmation button being adjacent to the donation display panel and the affirmation button and electronically connected to the arithmetic logic unit such that if the disaffirmation button is activated, the arithmetic logic unit determines that the final amount of change to be returned is equal to the initial amount of change to be returned to the customer;
(f) an output port, the output port being connected to the arithmetic logic unit and transmitting to the electronic cash register data on the final amount of change.

18. The virtual fundraising device of claim 17 further comprising a donee display panel, the donee display panel being adjacent to the donation display panel and displaying a donee.

19. The virtual fundraising device of claim 17 further comprising a processing unit, the processing unit being electronically connected to the arithmetic logic unit, and wherein the processing unit accumulates unique identifier data on the donation.

20. The virtual fundraising device of claim 17 further comprising a plurality of additional affirmation buttons, the plurality of additional affirmation buttons being adjacent to the donation display panel and electronically connected to the arithmetic logic unit such that if one of the plurality of additional affirmation buttons is activated the arithmetic logic unit calculates a final amount of change to be returned to the customer by subtracting a number of pennies associated with the
one of the plurality of additional affirmation buttons from the initial amount of change to be returned to the customer.

21. The virtual fundraising device of claim 19 further comprising a receipt dispenser, the receipt dispenser being electronically connected to the processing unit and providing a receipt when the affirmation button is activated on which is printed data on the calculated number of pennies and the unique identifier data on the donation.

22. The virtual fundraising device of claim 19 further comprising a network port, the network port being electronically connected to the processing unit and, in response to the activation of the affirmation button, transmitting to a separate location data on the calculated number of pennies and the unique identifier data on the donation.
FIG. 1

FIG. 2A
FIG. 3

DONATION DISTRIBUTION AND RECORDING SYSTEM

COLLECTION SERVER 304
VFD NETWORK 302
SECURE LINK 306

DONATION/CUSTOMER DATABASE 308

INTERNET INTERFACE SERVER 310b
SECURE LINK 310a

WEBSITE

DONEE DATABASE/ADVERTISING

FIG. 4

DONATION/CUSTOMER DATABASE 306

CUSTOMER PERSONAL INFO
IDENTIFICATION NO.
SECURITY CODE
CHARITY PREFERENCES
TAX BRACKET
BILLING ADDRESS
CREDIT CARD ACCOUNT INFO

CUSTOMER DONATION INFO
INDIVIDUAL TRANSACTION RECORDS
ESTABLISHMENT NAME AND LOCATION
TRANSACTION TIME AND DATE
TRANSACTION IDENTIFIER
AMOUNT DONATED
DONEE(S) SELECTED

CUMULATIVE DONATION RECORDS
BY DONEE
BY YEAR

PROMOTIONAL RECORDS
DONATION POINTS ACCUMULATED
DONATION POINTS AVAILABLE
DONATION POINTS REDEEMED

SUBSTITUTE SHEET (RULE 26)
CUSTOMER APPROACHES THE CASHIER OF AN ESTABLISHMENT TO PURCHASE PRODUCT OR SERVICE

CUSTOMER TRANSfers CASH TO THE CASHIER TO PURCHASE PRODUCT OR SERVICE AND CASH AMOUNT IS ENTERED IN AN ELECTRONIC CASH REGISTER

DOES THE CASH AMOUNT TRANSFERRED EXCEED PURCHASE PRICE? N

EXCESS AMOUNT DUE IS COMMUNICATED TO THE CUSTOMER

CUSTOMER SPECIFIES A DONATION AMOUNT

IS DONATION AMOUNT SPECIFIED NOT ZERO? N

EXCESS AMOUNT IS RECALCULATED AND RETURNED TO THE CUSTOMER

DATA ON THE DONATION TRANSACTION IS ELECTRONICALLY RECORDED AND STORED AT THE ESTABLISHMENT

PRINT THE DATA ON A DONATION TRANSACTION RECEIPT AND PROVIDE TO THE CUSTOMER

SEND THE DATA TO A DONATION DISTRIBUTION AND RECORDING CENTER

STORE THE TRANSACTION DATA AT THE DONATION DISTRIBUTION AND RECORDING CENTER

CUSTOMER ACCESSES THE DONATION DISTRIBUTION AND RECORDING CENTER VIA THE INTERNET AND SPECIFIES THE DISPOSITION OF THE DONATION TRANSACTION

ESTABLISHMENT SENDS THE COLLECTED DONATIONS TO THE DONATION DISTRIBUTION AND RECORDING CENTER

SEND DONATION AMOUNTS TO SPECIFIED DONEES

FIG. 5
**INTERNATIONAL SEARCH REPORT**

### A. CLASSIFICATION OF SUBJECT MATTER

**IPC 7**

G06F17/60

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)

**IPC 7**

G06F

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).

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category *</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<td>A</td>
<td>US 5 665 952 A (ZIARNO WITOLD A) 9 September 1997 (1997-09-09)</td>
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<td></td>
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* Special categories of cited documents:

- **A** document defining the general state of the art which is not considered to be of particular relevance.
- **E** earlier document but published on or after the international filing date.
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- **O** document referring to an oral disclosure, use, exhibition or other means.
- **P** document published prior to the international filing date but later than the priority date claimed.

- **T** later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention.
- **X** document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone.
- **Y** document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- **S** document member of the same patent family.

**Date of the actual completion of the international search:**

28 January 2000

**Date of mailing of the international search report:**

09/02/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk
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Authorized officer

Schmidt, A

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