DETAILLED DESCRIPTION OF THE INVENTION

[0009] Figure 1 illustrates a block diagram of the electronic display device 100 according to a preferred embodiment of the present invention. The electronic display device 100 includes a computer interface 110, an electronic display screen 120, a processing unit 130, a memory device 140, a battery 150, a transceiver 160, a location device 170, and a wearable device 180. The processing unit 130 includes a timing device 132. The transceiver 160 includes a transmitter 162 and a receiver 164.

[0010] In the electronic display device 100, the computer interface 110 is in unidirectional communication with the electronic display screen 120 from computer interface 110 to electronic display screen 120. The computer interface 110 is electrically connected to the electronic display screen 120. The computer interface 110 is in bidirectional communication with the processing unit 130. The computer interface 110 is electrically connected to the battery 150. The processing unit 130 is in bidirectional communication with the memory device 140. The processing unit 130 is electrically connected to the battery 150. The processing unit 130 is in unidirectional communication with the transceiver 160. The processing unit 130 is in unidirectional communication with the transmitter 162 from the processing unit 130 to the transmitter 162. The processing unit 130 is in unidirectional communication with the receiver 164 from the receiver 164 to the processing unit 130. The memory device 140 is electrically connected to the battery 150. The battery 150 is electrically connected to the transceiver 160. The transceiver 160 is in bidirectional communication with the location device 170. The location device 170 is in unidirectional communication with the transmitter 162 from the transmitter 162 to the location device 170 and with the receiver 164 from the location device 170.
to the receiver 164. The wearable device 180 is mechanically connected to the electronic display screen 120.

[0011] In operation, the electronic display device 100 may be connected to a computer through a computer interface cord. When the electronic display device 100 is connected to a computer, AC power flows through the computer interface 110 into the battery 150 charging the battery 150. From the battery 150, power flows to the processing unit 130, the memory device 140, and the transreceiver 160. When the electronic display device 100 is detached from a computer, the battery 150 supplies the power to the electronic display device 100.

[0012] In operation, when the electronic display device 100 is connected to a computer, an image may enter the electronic display device 100 through the computer interface 110. AC power flows from the computer interface 110 into the electronic display 120. The image is sent to the electronic display screen 120 from the computer interface and the image is displayed on the electronic display screen 120. Once the image is displayed on the electronic display screen 120, the image remains on the screen without the computer interface 110 powering the electronic display screen 120. When the electronic display device 100 is disconnected from the computer, the image is remains on the electronic display screen 120.

[0013] In operation, when the electronic display device 100 is connected to a computer, the timing device 132 may receive the current time from the computer through the computer interface 110. The timing device 132 keeps track of the current time when the electronic display device 100 is not connected to a computer.

[0014] In operation, a timing data unit enters the electronic display device 100 through the computer interface 110 into the processing unit 130. The processing unit 130 then stores the timing data unit in the memory device 140. When the timing data unit is the same as the time
given on the timing device 132, the processing unit 130 initiates the transceiver 160. The transmitter 162 sends a signal requesting the geographic location of the location device 170 from the location device 170. The location device 170 determines its geographic location and transmits a signal to the receiver 164 giving the geographic location. The processing unit 130 retrieves the geographic location from the receiver 164 and stores the geographic location and the time the geographic location was received in the memory device 140.

[0015] In operation, a request for location data enters the electronic display device 100 through the computer interface 110 into the processing unit 130. The processing unit 130 then retrieves the geographic location stored on the memory device 140. The processing unit 130 transmits the geographic location through the computer interface 110.

[0016] In operation, the wearable device 180 encloses the electronic display screen 120 and does not cover the front of the electronic display screen 120. The wearable device 180 allows a person to wear the electronic display screen 120.

[0017] In the preferred embodiment, the computer interface 110 is a universal serial bus receptacle and a universal serial bus cord with a universal serial bus plug on both ends is plugged into the computer interface 110 and a computer. Alternatively, the computer interface 110 may be a universal serial bus plug that plugs directly into the computer or may be connected to the computer by a universal serial bus cord with a plug on one end and a receptacle on the other end. The computer interface 110 may be connected to a computer through a connection that does not transmit AC power. If that is the case, then the electronic display device 100 also includes a power interface through which the electronic display device 100 receives electrical power. The computer interface 110 may alternatively a different type of data port, like a FireWire port, a serial port, a parallel port, a telephone jack, an Ethernet port or a wireless transceiver.
In the preferred embodiment, the electronic display screen 120 is the LG.Philips LCD color A4-sized e-paper. This electronic display screen 120 is less than one millimeter thick, may be bent 180 degrees without breaking, and may display up to 4096 colors. Alternatively, the electronic display screen 120 may be any electronic display screen where an image remains on the screen when power is disconnected. The electronic display screen 120 may be any electronic paper display: an electrophoretic display, like Amazon Kindle, or Sony Reader, a bistable LCD, an organic electroluminescent display, PARC’s Gyronic, or Lucent’s E Ink.

In the preferred embodiment, the transceiver 160 is a Bluetooth transceiver and the location device 170 is in a cellular phone. The cellular phone also has a Bluetooth transceiver. The Bluetooth transceivers have an established trusted relationship so that they may exchange data. The radius of a Bluetooth transceiver is typically 30 feet meaning that the transceiver 160 and the location device 170 must be less than 30 feet apart to send and receive signals. Alternatively, the location device 170 may be a handheld global positioning receiver with a Bluetooth transceiver, like a Garmin StreetPilot or a GlobalTop G66.

The transceiver 160 and location device 170 may alternatively send and receive a different type of signal, like a wireless network, a radio, or an infrared signal. The transceiver 160 and location device 170 may also send and receive signals through a data cord, like a universal serial bus connection.

In an alternative embodiment of the electronic display device 100, the electronic display screen 120 is electrically connected to the battery 150. The electronic display screen 120 is in unidirectional communication with the processing unit 130.

In operation, when the electronic display device 100 is connected to a computer, a plurality of images enter the electronic display device 100 through the computer interface 110.
into the processing unit 130. The processing unit 130 stores the images in the memory device 140.

[0023] In operation, when the electronic display device 100 is not connected to a computer, the processing unit 130 periodically retrieves an image from the memory device 140. The battery 150 supplies power to the electronic display screen 120 and the processing unit 130 sends the image to the electronic display screen 120 so that the image is displayed on the electronic display screen 120. Once the image is changed, the battery 150 stops supplying power to the electronic display screen 120. The process repeats so that the image on the electronic display screen 120 is changed periodically. The processing unit 130 cycles through the images so that each image is displayed in a predetermined order.

[0024] The electronic display screen 120 in this embodiment may be a display screen that requires power to display images, like a liquid crystal diode display, a plasma display, or digital light processing displays.

[0025] Alternatively, the processing unit 130 randomly selects the images that are displayed. Alternatively, the processing unit 130 changes the image on the electronic display screen 120 at random times.

[0026] Figure 2 illustrates a front view of the electronic display device 100 according to a preferred embodiment of the present invention. The electronic display device 100 includes the electronic display screen 120 of Figure 1, the transreceiver 160 of Figure 1, the computer interface 110 of Figure 1, and the wearable device 180 of Figure 1. The wearable device 180 includes a casing 210, a left strap unit 220, and a right strap unit 230. The left strap unit 220 includes a lower left strap 222, a left fastening device 225, and an upper left strap 224. The right strap unit 230 includes an upper right strap 234, a right fastening device 235, and a lower right
strap 232. The left fastening device 225 includes lower left coupler 227 and an upper left coupler 228. The right fastening device 235 includes a lower right coupler 237 and an upper right coupler 238. The casing 210 includes a lower left loop 212, an upper left loop 214, an upper right loop 216 and a lower right loop 218.

[0027] The casing 210 encloses the electronic display screen 120 so that the casing 210 forms a back side, a top side, a bottom side, a right side, a left side, and a front side around the electronic display screen 120. The back side, top side, bottom side, right side, and left side completely cover the electronic display screen 120. The front side covers the edges of the front of the electronic display screen 120 so that most of the front of the electronic display screen 120 is visible. The lower left loop 212 is on the left side of the casing 210. The upper left loop 214 is on the top side of the casing 210. The upper right loop 216 is on the top side of the casing 210. The lower right loop 218 is on the right side of the casing 210. One end of the lower left strap 222 attaches to the lower left loop 212. The other end of the lower left strap 222 attaches to the lower left coupler 227 so that the length of the lower left strap 222 between the lower left loop 212 and the lower left coupler 227 may be changed. The lower left coupler 227 may be attached and detached from the upper left coupler 228 a plurality of times. One end of the upper left strap 224 attaches to the upper left coupler 228 and the other end attaches to the upper left loop 214. One end of the upper right strap 234 attaches to the upper right coupler 238 and the other end attaches to the upper right loop 216. The upper right coupler 238 may be attached and detached from the lower right coupler 237 a plurality of times. One end of the lower right strap 232 attaches to the lower right loop 218. The other end of the lower right strap 232 attaches to the lower right coupler 237 so that the length of the lower right strap 232 between the lower right loop 218 and the lower right coupler 237 may be changed. The transreceiver 160 is enclosed in
the casing 210. The casing 210 encloses the computer interface 110 so that a computer interface cord may be plugged into the computer interface 110. The transreceiver 160 is in bidirectional electric communication with the computer interface 110. The electronic display screen 120 is in unidirectional communication with the computer interface 110 from the computer interface 110 to the electronic display screen 120.

[0028] In operation, a user may separate the left fastening device 225 by pulling the upper left coupler 228 and the lower left coupler 227 apart. The user may then place the upper left strap 224 over the user's left shoulder, pull the lower left strap 222 from under the user's left armpit, and connect the lower left coupler 227 and the upper left coupler 228 so that the casing 210 and the left strap unit 220 form a loop around the user's left arm. The user may separate the right fastening device 235. The user may then place the upper right strap 234 over the user's right shoulder, pull the lower right strap 232 from under the user's right armpit, and connect the lower right coupler 237 to the upper right coupler 238 so that the casing 210 and the right strap unit 230 form a loop around the user's right arm. Then, the right strap unit 230 rests on the user's right shoulder and the left strap unit 220 rests on the users left shoulder so that the visible portion of the electronic display screen 120 faces away from the user and spans the user's back.

[0029] In operation, the electronic display device 100 may be connected to a computer through a computer interface cord. A computer interface cord plugs into the computer interface 110 and the other end of the computer interface cord plugs into the computer. An image may enter the electronic display device 100 through the computer interface 110 and into the electronic display screen 120 where the image is displayed on the electronic display screen 120. The image remains on the electronic display screen 120 when the electronic display device 100 is disconnected from the computer.

[Figures]
Alternatively, in operation, a user may place his left hand through the loop formed by the casing 210 and the left strap unit 220 and slide the loop up his left arm. The user may place his right hand through the loop formed by the casing 210 and the right strap unit 230 and slide the loop up his right arm. Then, the right strap unit 230 rests on the user's right shoulder and the left strap unit 220 rests on the user's left shoulder so that the visible portion of the electronic display screen 120 faces away from the user and spans the user's back.

Alternatively, in operation, a user may place the right strap unit 230 over the user's left shoulder and place the left strap unit 220 over the user's right shoulder so that the visible portion of the electronic display screen 120 faces away from the user and spans the user's chest.

Alternatively, the user may place the upper right strap 234 over his right shoulder and pull the lower left strap 222 from under his left armpit and attach the lower left coupler 227 to the upper right coupler 238 so that the visible portion of the electronic display screen faces away from the user and spans the user's back. Also the user may place the upper right strap 234 over his left shoulder and pull the lower left strap 222 from under his right armpit and attach the lower left coupler 227 to the upper right coupler 238 so that the visible portion of the electronic display screen faces away from the user and spans the user's chest. The same may be done with the upper left strap 224 and the lower right strap 232.

In alternative embodiments, the upper straps may have an adjustable length between the loop and fastener, the upper and lower straps may have an adjustable length between the loop and the fastener, or neither may have an adjustable length. Also, the strap units may consist of one strap that attaches to a top loop and to a side loop.

In an alternative embodiment, the wearable device 180 may have only a lower right strap 232 and an upper left strap 224 where the lower right coupler 237 and the upper left coupler 228
may be attached and detached a plurality of times. Also the wearable device 180 may have only a lower left strap 222 and an upper right strap 234 where the lower left coupler 227 and the upper right coupler 238 may be attached and detached a plurality of times. Alternatively, the wearable device 180 may have one strap attached to a top loop and a side loop.

[0035] In a preferred embodiment, the right fastening device 235 and left fastening device 225 are side release plastic buckles. Alternatively, the fastening devices may be any device that may be attached and detached a plurality of times, like snap fasteners, buckles, pins, clasps, tacks, Velcro, zippers. The fastening devices may also be a button attached to one strap and a button hole in the other strap. In another embodiment, the strap units may consist of one strap connected from a top loop to a side loop.

[0036] In alternative embodiments, the wearable device 180 may be any device that allows the electronic display screen 110 to be carried for a long period of time and easily visible to others. The wearable device 180 may have a support structure like a backpack, a messenger bag, or an article of clothing, like a t-shirt. The wearable device 180 may also have a support structure like a sandwich board or a snare drum carrier. The wearable device 180 may be supported by the user’s neck, like a saxophone neck strap, instead of the user’s shoulders. The wearable device 180 may also be wrapped around the user’s torso, like a back brace, and not be supported by the user’s neck or shoulders.

[0037] In a preferred embodiment, the lower left strap 222, the upper left strap 224, the lower right strap 232, and the upper right strap 234 are made of nylon. Alternatively, the straps may be made of any flexible material that is able to support the weight of the electronic display device 200, like fabric, plastic, metal, foam, vinyl, yarn, chain, ribbon, cable, rope, or Velcro.
[0038] In the preferred embodiment, the casing 210 forms an air-tight seal around the electronic display screen 120 and the casing 210 is about three to four millimeters thick, 300 millimeters long, and 215 millimeters wide. In alternative embodiments, the casing may be any size large enough to enclose an electronic display screen. The casing 210 may not enclose the electronic display screen 120 and instead attach to the electronic display screen 120 through a clamp or glue. In an embodiment of the invention, the casing 210 is made from a lightweight, flexible material, like plastic, metal, or fabric. The casing 210 may also be made from non-flexible materials, like wood, metal, or glass.

[0039] In an embodiment, the lower left loop 212, the upper left loop 214, the upper right loop 216 and the lower right loop 218 are molded from the same material as the rest of the casing so that the casing is a single piece. Alternatively, the casing 210 may be composed of a plurality of parts that are attached. The loops may also be any type of attachment point for straps. For instance, the casing 210 may be composed of two halves, a front half and a back half whose connection seam runs around the thinnest side of the electronic display screen 120 and right strap unit 230 and left strap unit 220 may be pinched between the two sides of the casing 210.

[0040] In an alternative embodiment of the present invention, a light may be attached to the casing to light the visible portion of the electronic display screen 120. The light may be powered by the battery 150 of Figure 1 or powered by a separate battery. The light may be a low-power light emitting diodes, a halogen light bulb, a fluorescent light bulb, an incandescent light bulb, or a fiber optic light. Also a plurality of lights may be attached to the casing, like a string of Christmas lights.

[0041] Figure 3 illustrates a block diagram of the registered electronic display device user hiring system 300 according to a preferred embodiment of the present invention. The registered
electronic display system user hiring system 300 includes the electronic display device 100 of Figure 1, an advertiser computer 305, a user computer 310, a server 320, a server memory 330, and a website 340. The electronic display device 100 includes the computer interface 110 of Figure 1 and the electronic display screen 120 of Figure 1. The server memory 330 stores a user account created by the method of registering an electronic display device 700 of Figure 7.

[0042] In the registered electronic display device user hiring system 300, the electronic display device 100 is in unidirectional communication with the user computer 310 from the user computer 310 to the electronic display device 100 through the computer interface 110. The computer interface 110 is in unidirectional communication with the electronic display screen 120 from the computer interface 110 to the electronic display screen 120. The user computer 310 is in bidirectional communication with the server 320. The advertiser computer 305 is in unidirectional communication with the server 320. The server memory 330 is in bidirectional communication with the server 320. The website 340 is in communication with the server 320.

[0043] In operation, an advertiser accesses the server 320 through the advertiser computer 305. The advertiser sends a job listing to the server 320, where the job listing includes a predetermined geographic location, a predetermined time period, an image, and a number of users. The job listing seeks a number of users with an electronic display device 100 to wear the electronic display device 100 in the predetermined geographic location during the predetermined time period while the image is displayed on the electronic display screen 120. The server 320 stores the job listing in the server memory 330. The advertiser is required to pay a monetary fee in order for the job listing to be published on the website 340. When the monetary fee has been paid, the server 320 publishes the job listing on the website 340 so that a user with a user account stored in the server memory 330 may view the job listing.
In operation, a user views a job listing on the web site 340 through the user computer 310. The user may respond to the job listing by sending a response to the server 320. The response includes the user name of user sending the response and a desired payment amount. The response to the job listing is an offer from the user which states that the user will wear an electronic display device 100 in the predetermined geographic location during the predetermined time period with the electronic display screen 120 displaying the image in exchange for the user being paid the desired payment amount. The server 320 stores the response in a response data set for the job listing in the server memory 330. The server 330 determines whether there is a plurality of responses with the same user name stored in the response data set for the job listing. If there is, then the server 320 stores only the response with the user name that has the lowest desired payment amount in the response data set for the job listing and deletes any other responses with the same user name from response data set for the job listing.

In operation, at a predetermined end time for the job listing, the server 320 stops storing responses to the job listing in the response data set. The server 320 then selects a predetermined number of responses where the predetermined number is equal to the number of users for the job listing. The server 320 chooses the responses with the lowest desired payment amount. The server 320 then calculates the cost of the selected users, where the cost of the selected users is the sum of the desired payment amounts in the selected responses. The server 320 then calculates the job payment amount, where the job payment amount is the cost of the selected users plus a commission fee. The commission fee is 15% of the cost of the selected users. The server 320 receives the job payment amount from the advertiser. The server 320 deposits the cost of the selected users in a financial holding account.
[0046] For each of the selected responses, the server 320 retrieves the user contact information from the user account associated with the user name in the selected response from the server memory 330. The server 320 uses the user contact information to send the user a notification, where the notification informs the user that the response the user was submitted was accepted and instructs the user to download the image to an electronic display device 100.

[0047] In operation, when the user has submitted a response to a job listing that was selected, the user connects the electronic display device 100 to the user computer 310 and accesses the server 320 through the user computer 310. The server 320 then sends the image in the job listing the user was selected for to the electronic display device 100 through the computer interface 110 so that the image is displayed on the electronic display screen 120.

[0048] In an alternative embodiment, the server 320 may publish the job listing before the monetary fee has been paid. Also, the advertiser may not be required to pay a monetary fee in order for the job listing to be published on the website 340. In an alternative embodiment, the advertiser may include a maximum payment amount in the job listing, where the maximum payment amount is the most the advertiser will pay a user to wear an electronic display device 100 displaying an image on the electronic display screen 120 in a predetermined geographic location during a predetermined time period. The advertiser may be required to pay a monetary fee for including this information in the job listing. In an embodiment, the advertiser may also pay additional fees to upgrade the job listing, like bolding or highlighting text in the job listing, including subtitles and borders in the job listing, having a later predetermined end time, having the job listing featured an a main page of the website 340, or other similar features provided by online auction sites like eBay.
[0049] In the preferred embodiment, the advertiser pays job payment amount before the time period in the job listing. Alternatively, the advertiser may pay the job payment amount during or after the time period of the job listing. The advertiser may also pay the cost of the selected users and the commission fee separately. Also, the amount the advertiser owes may be aggregated and the advertiser may pay the entire obligation at set time periods, like once a month or once a week. The server 320 may keep track of the amount owed by the advertiser or may conduct the transaction through a financial institution. The advertiser may also pay a sum of money before incurring any debt and then the amount owed by the advertiser may be deducted from that sum. Any debt in access of the sum is collected from the advertiser. The advertiser may make payment by any ordinary method of paying obligations, like a check, money order, cash, wire transfer, or credit card. In an alternative embodiment, the advertiser may pay the selected users directly.

[0050] In an alternative embodiment, the commission fee may be a different percentage of the cost of the selected users. The commission fee may also be a flat rate, like $10 or $100 per job listing or per selected user.

[0051] In an embodiment, the website 340 may require a user to log in using a user name and password associated with a user account stored in the server memory 330 before any job listings may be viewed. Alternatively, the website 340 may be visible without requiring a login, but a user needs to log in using a user name in password associated with a user account stored in the server memory 330 before the user may submit a response. The server 320 may also accept responses without requiring a log in, but a user needs to include his user name in the response. The web server/application 320 checks the user name in the response to see if it was associated with a user account stored in the server memory 330. If the user name was not associated with a
user account, then the response is deleted. If the user name was associated with a user account, then the response is stored in the response data set. Alternatively, the responses may be stored in the response data set and the responses with user names that are not associated with a user account may be deleted when the plurality of responses with the same user name are deleted.

[0052] Figure 4 illustrates a block diagram of the electronic display location tracker system 400 according to the preferred embodiment of the present invention. The electronic display location tracker system 400 includes the electronic display device 100 of Figure 1, a user computer 410, a server 420, a server memory 430, and a geographic coordinate converter 440. The electronic display device 100 includes the computer interface 110 of Figure 1, the electronic display screen 120 of Figure 1, the processing unit 130 of Figure 1, the memory device 140 of Figure 1, the transceiver 160 of Figure 1, and the location device 170 of Figure 1. The transceiver includes the transmitter 162 of Figure 1, and the receiver 164 Figure 1. The processing unit includes the timing device 132 of Figure 1. The location device 170 includes a transmitter 472 and a receiver 474.

[0053] In the electronic display location tracker system 400, the electronic display device 100 is in bidirectional communication with the user computer 410 through the computer interface 110. The electronic display screen 120 is in physical proximity to the location device 170. The transceiver 160 is also in communication with the location device 170 through unidirectional communication from the transmitter 162 to the receiver 474 and through unidirectional communication from the transmitter 472 to the receiver 164. In the electronic display device 100, the processing unit 130 is in bidirectional communication with the computer interface 110 and the memory device 140. The processing unit 130 is in unidirectional communication from the processing unit 130 to the transmitter 162 and from the receiver 164 to the processing unit.
130. The user computer 410 is in bidirectional communication with the server 420. The server 420 is in bidirectional communication with the server memory 430 and with the geographic coordinate converter 440.

[0054] In operation, the server 420 receives a geographic address and time period. The server 420 transmits the geographic address to the geographic coordinate converter 440. The geographic coordinate converter 440 converts the geographic address into geographic coordinates and transmits the geographic coordinates to the server 430. The server 420 stores the geographic coordinates as the event geographic coordinates in the server memory 430. The server 420 creates a time data set that includes times between the start time and end time of the time period. The web server/application 420 stores the time data set in the server memory 430.

[0055] In operation, when the electronic display device 100 is connected to the user computer 410 through the computer interface 110, the time data set is transmitted from the server 420 through the user computer 410 and the computer interface 110 into the processing unit 130. The processing unit 130 then stores the timing data unit in the memory device 140.

[0056] In operation, when one of the times stored in the timing data set is the same as the time given on the timing device 132, the processing unit 130 tells the transmitter 162 to send a signal requesting the geographic coordinates of the location device 170 the receiver 474. The location device 170 determines its geographic coordinates and the transmitter 472 sends a signal to the receiver 164 giving the geographic coordinates. The processing unit 130 retrieves the geographic coordinates from the receiver 164 and stores the geographic coordinates and the time it was received in a tracking location data set in the memory device 140. This process repeats each whenever a time stored in the time data set matches the time given on the timing device 132.
In operation, when the electronic display device 100 is connected to the user computer 410, the server 420 may request the tracking location data set. The request is transmitted through the user computer 410 and the computer interface 110 into the processing unit 130. The processing unit 130 retrieves the tracking location data stored on the device memory 140 and transmits it to the server 420 through the computer interface 110 and the user computer 410. The server 420 begins the payment process by storing the tracking location data set in the server memory 430. The server 420 then calculates the distance between the event geographic coordinates and each of the geographic coordinates stored in the tracking location data set and stores those distances in a distance data set. The server 420 then calculates the number of verified locations, where the number of verified location is the number of distances in the distance data set that are less than a predetermined maximum distance. The predetermined maximum distance may be set by the server 420 or by the advertiser. The server 420 then calculates the actual payment amount, where the actual payment amount is the desired payment amount times the number of verified locations divided by the number of geographic coordinates stored in the location tracking data set.

In operation, when the electronic display device 100 is connected to the user computer 410, the electronic display device 100 may receive a request from the user computer 410 that the tracking location data set in the memory device 140 be deleted. The request travels from the user computer 410 through the computer interface 110 into the processing unit 130. The processing unit 130 deletes the tracking location data set from the memory device 140.

In the preferred embodiment, the times stored in the timed data set are at fifteen minute intervals and the first time stored in the time data set is fifteen minutes after the start time of the time period. There are no times stored in the time data set after the end time of the time period.
Alternatively, the time intervals may be shortened so that there is less time between the stored times, like five, seven, or ten minutes. The intervals may also be lengthened. Alternatively, the times stored in the time data set may include the start time of the time period or the end time of the time period. The intervals between the times stored in the time data set may also be unequal; their length may be randomly chosen or chosen according to an algorithm.

[0060] In an embodiment of the present invention, the predetermined maximum distance is received by the server 420 along with the geographic address and the server 420 stores the predetermined distance in the server memory 430. Alternatively, the server 420 may receive the predetermined maximum distance after it has received the geographic address. In another embodiment, the server 420 may have a default predetermined maximum distance the server 420 uses when it has not received another predetermined maximum distance. The predetermined maximum distance is generally between one mile and 300 yards.

[0061] In an alternative embodiment, the electronic display location tracker system 400 may not include a geographic coordinate converter 440 when the server receives a geographic address in the form of geographic coordinates. Alternatively, the server may receive the geographic address in different form, where the server may calculate the distance between the geographic address and the geographic coordinates stored in the tracking location data set.

[0062] In an alternative embodiment, the server may perform the payment process by using the method of paying registered electronic display users of Figure 10 or of Figure 11.

[0063] Figure 5 illustrates a block diagram of the electronic display location tracker system 500 according to an alternative embodiment of the present invention. The electronic display location tracker system 500 includes the electronic display device 100 of Figure 1, the server 420 of Figure 4, the server memory 430 of Figure 4, a geographic coordinate converter 440 of Figure 4,
a timing device 550, a transmitter 560, and a receiver 570. The electronic display device 100 includes the electronic display screen 120 of Figure 1, and the location device 170 of Figure 1. The location device 170 includes a location transmitter 582 and a location receiver 584.

[0064] The electronic display screen 120 is in physical proximity to the location device 170. The location device 170 is in unidirectional communication with the transmitter 560 from the transmitter 560 to the location receiver 584. The location device 170 is also in unidirectional communication with the receiver 570 from the location transmitter 582 to the receiver 570. The transmitter 560 is in unidirectional communication with the server 420 from the server 420 to the transmitter 560. The receiver 570 is in unidirectional communication with the server 420 from the receiver 570 to the server 420. The server 420 is in bidirectional communication with the server memory 430 and the geographic coordinate converter 440. The server 420 is in unilateral communication with the timing device 550 from the timing device 550 to the server 420.

[0065] In operation, the server 420 receives a geographic address and a time period. The server 420 transmits the geographic address to the geographic coordinate converter 440. The geographic coordinate converter 440 converts the geographic address into geographic coordinates and transmits the geographic coordinates to the server 420. The server 420 stores the geographic coordinates as the event geographic coordinates in the server memory 430. The server 420 creates a time data set that includes the start time of the time period, the end time of the time period, and regular intervals in between the start time and stop time of the time period. The web server/application 420 stores the time data set in the server memory 430.

[0066] In operation, the server 420 receives the current time from the timing device 550 and whenever the current time matches a time stored in the time data set, the web server/application 420 tells the transmitter 560 to send a message to the location receiver 584 in the location device
170 requesting the geographic coordinates the location device 170 is located at. The location device 170 determines its geographic coordinates and the location transmitter 582 sends a signal to the receiver 570 giving the geographic coordinates. The server 420 receives the geographic coordinates from the receiver 570 and stores the geographic coordinates and the time it was received in a tracking location data set in the server memory 430. This process repeats whenever a time stored in the time data set matches the time given by the timing device 550.

[0067] In operation, when the server 420 receives a current time from the timing device 550 that is after the end time of the time period data, the server 420 begins the payment process by retrieving the event geographic coordinates from the server memory 460. The server 420 then calculates the distance between the event geographic coordinates and the geographic coordinates stored in the tracking location data set and stores those distances in a distance data set. The server 420 then calculates the number of verified locations, where the number of verified location is the number of distances in the distance data set that are less than a predetermined maximum distance. The web server/application 420 platform then calculates the actual payment amount, where the actual payment amount is the desired payment amount times the number of verified locations divided by the number of geographic coordinates stored in the location tracking data set. The server 420 credits the financial account of the user whose user account is associated with the electronic display device 100 with the actual payment amount.

[0068] In an embodiment of the invention, the communication between the server 420 and the transmitter 560 and between the server 420 and the receiver 560 may be a direct communication. Also, the server 420 may communicate with an intermediary that communicates with the transmitter 560 or the receiver 570 may communicate with an intermediary who communicates with the server 420. There may also be a plurality of intermediaries who pass the
communication from the server 420 to the transmitter 560 or from the receiver 570 to the server 420.

[0069] Figure 6 illustrates a block diagram of the electronic display location tracker system 600 according to an alternative embodiment of the present invention. The electronic display location tracker system 600 includes the electronic display device 100 of Figure 1, a first cellular phone tower 630, a second cellular phone tower 640, a cellular network 650, the server 420 of Figure 4, the server memory 430 of Figure 4, the geographic coordinate converter 440 of Figure 4 and the timing device 550 of Figure 5. The electronic display device 100 includes the electronic display screen 120 of Figure 1 and the location device 170 of Figure 1, where the location device 170 is a cellular phone 670.

[0070] In the electronic display location tracker system 600, the electronic display screen 120 is in geographical proximity to the cellular phone 670. The cellular phone 670 is in unidirectional communication with a first cellular phone tower 630 from the cellular phone 670 to the first cellular phone tower 630. The cellular phone 670 is also in unidirectional communication with a second cellular phone tower 640 from the cellular phone 670 to the second cellular phone tower 640. The first cellular phone tower 630 and the second cellular phone tower 640 are in bidirectional communication with the cellular network 650. The server 420 is in bidirectional communication with the cellular network 650 and the server memory 430. The server 420 is in unidirectional communication with the timing device 550 from the timing device 550 to the server 420.

[0071] In operation, the cellular phone 670 sends a signal to the first cellular phone tower 630 and to the second cellular phone tower 640. When the signal is received at both the towers, the cellular network 650 calculates a cellular location area that the cellular phone 670 is in based on
the relative strength of the signal received at the first cellular phone tower 630 and the second cellular phone tower 640. The cellular location area may be 600 kilometers wide.

[0072] In operation, the server 420 receives a geographic address, a start time, and a stop time and stores the geographic address and times in the server memory 430. The server 420 then creates a time data set that includes the start time, the stop time, and regular intervals between the start and stop time. The server 420 stores the time data set in the server memory 430.

[0073] In operation, the server 420 receives the current time from the timing device 550 and whenever the current time matches a time stored in the time data set, the server 420 sends a request to the cellular network 650 for the current location of the cellular phone 670. The cellular network 650 receives the request and sends the server 420 the cellular location area that the cellular phone 670 was in. The server 420 receives the cellular location area and stores it in a tracking location data set in the server memory 430. This process repeats whenever a time stored in the time data set matches the time given by the timing device 550.

[0074] In operation, when the server 420 receives a current time from the timing device 550 that is after the stop time, the server 420 begins the payment process by calculating the number of verified locations, where the number of verified locations is the number of cellular location areas in the tracking location data set that have the geographic address in their boundaries. The web server/application 420 platform then calculates the actual payment amount, where the actual payment amount is the desired payment amount times the number of verified locations divided by the number of geographic coordinates stored in the location tracking data set. The server 420 credits the actual payment amount to the financial account of the user whose user account is associated with the cellular phone 670.
Figure 7 illustrates a flow chart 700 of a method of registering an electronic display device by a user according to a preferred embodiment of the present invention. First, at step 705, the user accesses the server through a computer, sends a user name to the server, and requests that a user account designated by the user name be created. Next, at step 710, the server determines whether there is already a user account stored in the server memory designated by the user name.

When there is already a user account stored in the server memory designated by the user name, then step 715 is performed where the server displays an error message on the computer that instructs the user to try a different user name and goes back to step 705.

When there is not a user account stored in the server memory designated by the user name already, then step 720 is performed where the server creates a user account designated by the user name in the server memory. The data entered by the user is stored in the user account that is unique to the particular user.

Next, at step 725, the user sends a password for the user name to the server, where the password allows a user access to the data stored in the user account. The user also sends user contact data to the server, where the user contact data allows the server to send messages to the user. Additionally, the user sends financial account data and a click-signed consent form to the server, where the financial account data includes the information needed to deposit money in the financial account associated with the financial account data and the consent form authorizes the server to deposit money in the financial account. The user sends a cellular phone number and a click-signed phone consent form to the server where the cellular phone number is associated with a cellular phone that is in the user's possession, has a global positioning system receiver, and a wireless network device. The phone consent form authorizes the server to request geographic
location information from the cellular phone and the cellular phone network the cellular phone uses. The server stores the user password, the user contact data, the financial account data, the consent form, and the cellular phone number in the user account.

[0079] At step 730, the server sends a message to the financial institution associated with the financial account requesting a temporary deposit be made in the financial account where the message may include the consent form. At step 735, the server determines whether the temporary deposit was successful, typically by receiving a message from the financial institution saying the temporary deposit was successful.

[0080] When the server determines the temporary deposit was not successful, then step 740 is performed where the server displays an error message on the computer that suggests that the user try sending different financial account data. The server then deletes the financial account data stored in the user account, receives new financial account data from the user, and stores the new financial account data in the user account. The method then proceeds back to step 730.

[0081] When the server determines the temporary deposit was successful, then step 745 is performed where the server withdraws the temporary deposit, typically by sending a message to the financial institution requesting the temporary deposit be withdrawn from the financial account.

[0082] Next, at step 750 the server sends a message to a transmitter requesting that the transmitter send a signal to the cellular phone that requests the geographic location of the global positioning system receiver. The request may be sent directly to a transmitter or through an intermediary like a cellular phone network. Next, at step 755, the server determines if a signal was received giving the geographic location of the global positioning system receiver.
[0083] When a signal is not received from the cellular phone giving the geographic location of the global positioning system receiver, then step 760 is performed where the server displays an error message to the computer that suggests the user try sending a different cellular phone number. The server then deletes the cellular phone number stored in the user account, receives new cellular phone number from the user, and stores the new cellular phone number in the user account. The method then proceeds back to step 750.

[0084] When a signal is received from the cellular phone giving the geographic location of the global positioning system receiver, then step 765 is performed where the server displays a confirmation message on the computer. The geographic location received or a map with the location of the geographic location marked may be displayed in the confirmation message.

[0085] At step 770, the user connects the electronic display device 100 of Figure 1 to the computer by plugging one end of a computer interface cord into the computer interface 110 of Figure 1 in the electronic display device 100 and plugging the other end into the computer, and the server reads the electronic display device's identification number from the memory device 140 of Figure 1 and stores it in the user account.

[0086] Next, at step 775, the server displays instructions for configuring the transreceiver 160 of Figure 1 and the transmitter 372 of Figure 3 and the receiver 374 of Figure 3 in the location device 170 of Figure 1 so that the transreceiver 160 may send and receive signals from the location device 170. The server may also send a message to the processing unit 130 of Figure 1 to calibrate the way the transreceiver 160 sends and receives signals, like changing the frequency of the signal the transreceiver 160 sends or receives. The server then sends a message to the processing unit 130 of Figure 1 requesting that the processing unit 130 initiate the transreceiver 160. The transreceiver 160 sends a signal to the location device 170 requesting the geographic
location of the location device 170. When a signal is received by the transreceiver 160 from the location device 170 giving the geographic location, the processing unit 130 stores the geographic location in the memory device 140. Next, at step 780, the server determines if the geographic location has been stored on the memory device 140.

[0087] When the geographic location has not been stored on the memory device 140, then the server repeats step 775.

[0088] When the geographic location has been stored on the memory in the electronic display device, then step 785 is performed where registration is complete. The server may display a registration completion confirmation message on the computer. The information stored in the user account may be changed by the user at a later time.

[0089] In an embodiment of the present invention, all the steps need not be performed for a user account to be created. For example, if a user has not yet received an electronic display device 100, then the user may skip steps 770 to 775 during the initial registration and complete them at a later time. Additionally, the server may display a confirmation message for the user when a step is completed.

[0090] In the preferred embodiment of the present invention, the financial account information received from the user is for a credit card account. Alternatively, the financial account information may be any type of account that money may be deposited in, like a savings account, a checking account, a money market account, or a PayPal account. In an alternative embodiment of the present invention, the user may not enter financial account information and the server may instead create a financial account data set where the actual payment amount is stored. The server then notifies a financial institution where the financial holding account is stored to pay the user the total of the amount in the financial account data set. This may be done after each job was
performed or after a set period of time, like once a month. The user may be paid using an ordinary method obligations are paid, like a check, a money order, a wire transfer, in cash, or in credits for some other obligation owed. The financial account data set is cleared after payment was made.

[0091] Figure 8 illustrates a flow chart 800 of a method of hiring registered electronic display device users according to a preferred embodiment of the present invention. First, at step 805, an advertiser begins by accessing the server through a computer and requests that the server create a new job listing, where the job listing solicits a user who will wear an electronic display device 100 of Figure 1 displaying the advertiser's image in a predetermined geographic location during a predetermined time period. The server creates a job listing data set, where the data for the job listing is stored.

[0092] At step 810, the advertiser sends a geographic address to the server, where the geographic address is the predetermined geographic location where the advertiser wants an electronic display device 100 to be worn by a user. The advertiser also sends a time period to the server, where the time period is the predetermined time period during which the advertiser wants an electronic display device 100 to be worn by a user. Additionally, the advertiser sends a number of users to the server, where the number of users is the number of users the advertiser wants to wear an electronic display device 100. The advertiser sends an image to the server, where the image may be sent to the electronic display device 100 so that the image is displayed on the electronic display screen 120 of Figure 1. The server stores the geographic address, the time period, the number of users, and the image in the job listing data set. At step 810, the advertiser may also send a maximum payment amount to the server, where the maximum payment amount is the most the advertiser will pay a user to wear an electronic display device displaying the
image in the predetermined geographic location during the predetermined time period. The server then stores the maximum payment amount in the job listing data set. The advertiser may be required to pay a monetary fee for sending the maximum payment amount.

[0093] At step 815, the server creates a time data set that includes a list of times at fifteen minute intervals during the time period beginning fifteen minutes after the start time of the time period. Alternatively, the times stored in the time data set may be randomly chosen or chosen according to an algorithm. The server then stores the time data set.

[0094] At step 820, the server publishes the job listing on a website that is accessible to a user with a registered electronic display device 100, where the published job listing includes the predetermined geographic location and predetermined time period. The advertiser may be required to pay a monetary fee in order for the job listing to be published.

[0095] At step 825, the server accepts a response to the published job listing from a user who has completed the method of registering an electronic display device 700 of Figure 7, where the responses give a desired payment amount for wearing the electronic display device 100 in the predetermined geographic location for the predetermined time period. The server stores the responses in a response data set, where the responses include the desired payment amount and the user name of the user who sent the response as created in step 720 of Figure 700.

[0096] At step 830, the server determines whether a predetermined end time for accepting responses has passed. It does so by receiving the current time from a timing device and determining whether the current time is after the predetermined end time. The predetermined end time may be set by the advertiser at step 810. The predetermined end time may also be set at a default time before the start time of the predetermined time period, like forty-eight hours before the start time.
When the predetermined end time has not passed, the server continues to accept and store responses at step 825.

When the predetermined end time has passed, then at step 835, the server selects the response from the response data set with the lowest desired payment amount and saves it in a selected response data set. The server then deletes the response with the lowest desired payment amount from the response data set. Next, at step 840, the server determines whether the number of responses stored in the selected response data set is equal to the number of users stored in the job listing data set.

When the number of responses stored in the selected response data set is not equal to the number of users stored in the job listing data set, then the server goes back to step 835.

When the number of responses stored in the selected response data set is equal to the number of users stored in the job listing data set, then at step 845, the server makes the image and time data set available for download by the selected users, where the selected users are the users whose user name is included in one of the responses stored in the selected response data set. The server also retrieves the user contact data for the selected users and sends a message to the selected users, where the message notifies the user he was selected and instructs him to download the image and time data set. The server also charges the advertiser the job payment amount, where the job payment amount is the cost of the selected users plus a commission fee. The cost of the selected users is the sum of the desired payment amounts in the selected responses and the commission fee is a percentage of the cost of the selected users. When payment is received from the advertiser, the cost of the selected users is deposited in a financial holding account.
At step 890, the user accesses the server using a computer and downloads the image and time data set. The user connects the electronic display device 100 to the computer by plugging a computer interface cord into the computer interface 110 and the computer. The image is transmitted to the electronic display device 100 through the computer interface 110 of Figure 1 so that the image is displayed on the electronic display screen 120. The time data set is transmitted to the electronic display device 100 through the computer interface 110 into the processing unit 130 of Figure 1 where the time data set is stored in the memory device 140 of Figure 1. The user then disconnects the electronic display device 100 from the computer and the image remains on the electronic display screen 120.

In an alternative embodiment of the present invention, an advertiser may choose to include a complimentary electronic display device 100 as a payment for a job listing. Then, when a user is selected to perform the job listing, the user a postal address where the electronic display device 100 is to be shipped. The server sends a message to the electronic display device supplier notifying the supplier to send an electronic display device 100 to the postal address received from the user. The electronic display device supplier then ships the electronic display device 100 to the postal address. The advertiser pays the price of the electronic display device 100.

Figure 9 illustrates a flow chart 900 of a method tracking the location of an electronic display device. First, at step 910, the electronic display device 100 of Figure 1, receives a time data set through the computer interface 110 of Figure 1 and the processing unit 130 of Figure 1 stores the timing data set in the memory device 140 of Figure 1. At step 920, the processing unit 130 receives the current time from the timing unit 132 of Figure 1 and determines whether the current time is the same as a time stored in the time data set.
When the current time is the same as a time stored in the time data set, then at step 930, the processing unit 130 initiates the transreceiver 160 of Figure 1 by instructing the transmitter 162 of Figure 1 to send a signal requesting the geographic location for the location of the location device 170 of Figure 1 to the receiver 374 of Figure 3 in the location device 170. The location device 170 determines its geographic location and the transmitter 372 of Figure 3 sends a signal to the receiver 164 of Figure 1 giving the geographic location. Next at step 940, the processing unit 130 retrieves the geographic location from the receiver 164 and stores the geographic location in a tracking location data set in the memory device 140. The time the geographic location was received may also be stored in the tracking location data set. The method then goes back to step 920.

When the current time is not the same as a time stored in the time data set, then at step 950, the processing unit 130 determines whether the current time is after the latest time stored in the time data set. When the current time is not after the latest time stored in the time data set, then the method goes back to step 920.

When the current time is after the latest time stored in the time data set, then the method is finished.

Alternatively, this method may be performed using the devices of Figure 5 or Figure 6. When using these devices, the time data set need not be transmitted to the electronic display device. The server 420 of Figure 4 performs steps 920, 940, and 950 and initiate the transmitter 560 of Figure 5 or send a message to the cellular network 6 of Figure 650 in step 930.

Figure 10 illustrates a flow chart 1000 of a method of paying a registered electronic display device user according to a preferred embodiment of the present invention. The server retrieves the tracking location data set for one of the selected users for a job listing 1005.
The server determines whether the number of geographic locations stored in the tracking location data set plus an acceptable missing number is less than the number of times stored in the time data set 1010.

[00109] When the number of geographic locations stored in the tracking location data set plus an acceptable missing number is less than the number of times stored in the time data set, then at step 1020 automatic payment fails. The server sends the user a message giving contact information and instructing the user to use the contact information if the user wants to be paid for the job.

[00110] When the number of geographic locations stored in the tracking location data set plus an acceptable missing number is not less than the number of times stored in the time data set, then step 1025 is performed, where the server defines an acceptable area around the predetermined geographic location, where the acceptable area is the geographic space close enough to the predetermined geographic location to be considered a part of the predetermined geographic location. Next, at step 1030 the server determines the number of verified locations, where the number of verified locations is the number of geographic locations stored in the tracking location data set that are partially or entirely within the acceptable area. Then at step 1035, the server determines the actual payment amount for the user, where actual payment amount is the user's desired payment amount from his response to the job listing and multiplied by the verified number of locations and divided by the number of geographic locations stored in the tracking location data set.

[00111] Next, at step 1040, the user is paid the actual payment amount from funds in the financial holding account. The payment is made to the financial account associated with the financial account data in the user's user account.
In an embodiment of the present invention, the acceptable missing amount may be set at zero. Alternatively, step 1010 may be skipped. Also, the advertiser may define the acceptable area. Alternatively, the server may have a default acceptable area it uses.

Figure 11 illustrates a flow chart 1100 of a method of paying registered electronic display device users according to an alternative embodiment of the present invention. The server retrieves the tracking location data set for one of the selected users for a job listing 1105, where the tracking location data set includes geographic locations and the time the geographic locations were received. Next, at step 1110, the web server/application determines whether the earliest time in the time data set plus an acceptable delay time is later than the first time in the tracking location data set.

When the earliest time in the time data set plus an acceptable delay time is later than the first time in the tracking location data set, then at step 1115 automatic payment fails. The server sends the user a message giving contact information and instructing the user to use the contact information if the user wants to be paid for the job.

When the earliest time in the time data set plus an acceptable delay time is not later than the first time in the tracking location data set, then the step 1120 is performed, the web server/application determines whether the latest time in the time data set plus an acceptable delay time is later than the latest time in the tracking location data set.

When the latest time in the time data set plus an acceptable delay time is later than the latest time in the tracking location data set, then at step 1115 automatic payment fails. The server sends the user a message giving contact information and instructing the user to use the contact information if the user wants to be paid for the job.
When the latest time in the time data set plus an acceptable delay time is not later than the latest time in the tracking location data set, then step 1125 is performed, where the server defines an acceptable area around the predetermined geographic location, where the acceptable area is the geographic space close enough to the predetermined geographic location to be considered a part of the predetermined geographic location. Next, at step 1135, the server determines whether the geographic locations that correspond with the earliest and latest times in the tracking location data set are partially or entirely in the acceptable area.

When the geographic locations that correspond with the earliest and latest times in the tracking location data set are not partially or entirely in the acceptable area, then at step 1115 automatic payment fails. The server sends the user a message giving contact information and instructing the user to use the contact information if the user wants to be paid for the job.

When the geographic locations that correspond with the earliest and latest times in the tracking location data set are partially or entirely in the acceptable area, then step 1140 is performed, where the server determines verified number of locations, where the verified number of locations is the number of geographic locations stored in the tracking location data set that are partially or entirely within the acceptable area. Then at step 1145, the server determines the actual payment amount for the user, where actual payment amount is the user's desired payment amount from his response to the job listing multiplied by the verified number of locations and divided by the number of geographic locations stored in the tracking location data set.

Next, at step 1150, the user is paid the actual payment amount from funds in the financial holding account. The payment is made to the financial account associated with the financial account data in the user’s user account.
In an embodiment of the present invention, the acceptable delay time is the interval between the times in the time data set. Alternatively, the acceptable delay time may be the estimated time that it takes to receive a signal giving a geographic location after a signal requesting a geographic location had been sent out. The acceptable delay time may also be an arbitrarily set value.

Figure 12 illustrates a flow chart 1200 of a method of paying registered electronic display device users for phone call leads according to an embodiment of the present invention. In step 1210, a user who was selected through the method of hiring registered electronic display device users 800 of Figure 8 is wearing the electronic display device 100 of Figure 1 in the predetermined place during the predetermined time as specified in the job listing and the electronic display screen 120 of Figure 1 is displaying the image in the job listing. The user has a cellular phone. The cellular phone may be the location device 170 of Figure 1. The cellular phone number used to call the cellular phone is stored in the user’s user account as created through the method of registering an electronic display device 700 of Figure 7. The user allows a third party who is interested in the topic of the image displayed on the electronic display screen 120 to use his cellular phone to call a designated phone number. For example, if the image advertises a new checking account, a third party may call the designated phone number to establish the new checking account as advertised. In step 1220, a record of the number of calls received at the designated phone number from the user’s cellular phone is stored. The number of calls is sent to a server that has access to the user accounts created by the method of registering an electronic display device 700.

In step 1230, the advertiser calculates the number of false inquiry calls from the user’s cellular phone to the designated phone number, where a false inquiry call is a phone call
where the caller is not interested in the topic of the image displayed on the electronic display screen 120. For example, a false inquiry call may be one where the caller dialed the number and hung up without saying anything. The number of false inquiry calls is transmitted to the server. Next, at step 1240, the server calculates the number of phone call leads, where the number of phone call leads is equal to the number of calls received at the designated phone number from the user’s cellular phone minus the number of false inquiry calls.

[00124] In step 1250, the server calculates the phone lead payment amount by multiply the number of phone call leads by the lead payment rate, where the lead payment rate is the amount the advertiser has agreed to pay for each phone call lead. Next, at step 1260, the user is paid the lead payment amount. The user may be paid from funds in the financial holding account or directly by the advertiser. The payment is made to the financial account associated with the financial account data in the user’s user account.

[00125] In an alternative embodiment of the invention, step 1230 may be performed after step 1260. Then at step 1240, the number of phone call leads is equal to the number of calls received at the designated phone number from the user’s cellular phone. Then, after step 1260, the advertiser calculates the number of false inquiry calls from the user’s cellular phone to the designated phone number and sends the number of false inquiry calls to the server. Then, the server calculates the amount owed, where the amount owed is the number of false inquiry calls multiplied by the lead payment rate. The server charges the user the amount owed. The amount owed may be collected from the financial account associated with the user’s user account. Alternatively, step 1230 may be omitted entirely.

[00126] Figure 13 is a flow chart 1300 of a method for distributing an electronic display device according to an embodiment of the present invention. At step 1310, a customer accesses
the server through a computer and sends a message requesting that the electronic display device 100 of Figure 1 be sent to the customer. The customer also sends a postal address where the electronic display device 100 is to be shipped.

[00127] At step 1320, the server receives financial account information from the customer. The financial account information includes the information needed to receive payment from the financial account associated with the financial account information. The customer also authorizes that the price of the electronic display device 100 and be paid from the financial account. The price of the electronic display device 100 may include taxes and shipping and handling fees associated with selling and shipping the electronic display device 100 to the customer.

[00128] At step 1330, the server communicates with the financial institution where the financial account is held directly or through an intermediary. The intermediary may be another financial institution, like a credit card company or a bank. The server presents the financial account information and the authorization from the customer and requests that the price of the electronic display device be withdrawn from the financial account and paid to the supplier of the electronic display device 100.

[00129] At step 1340, the server sends a message to the electronic display device supplier notifying the supplier to send an electronic display device 100 to the postal address received from the customer. The supplier then ships the electronic display device 100 to that postal address.

[00130] In an alternative embodiment of the present invention, at step 1320, instead of submitting financial account information, the customer may establish a user account by using the method of Figure 7 and skipping steps 770 to 780. The customer then agrees that the price of the
The electronic display device 100 may be withheld from the customer's future earnings by the method illustrated in Figure 10 or 11. The price may be withheld upfront so that the customer receives no payment until the price of the electronic display device 100 is paid or portion of the actual payment amount may be credited to the price of the electronic display device 100 and the rest paid to the customer. If the full price of the electronic display device 100 has not been paid after a set period of time, like a year, then the remaining amount owed on the electronic display device 100 is collected using the financial account data information stored in the customer's user account.

[00131] In an alternative embodiment of the present invention, the customer may request that a complimentary the electronic display device 100 be sent to the customer. The customer does not agree to pay the price of the electronic display device 100, but may agree to pay the shipping and handling costs of shipping the electronic display device 100 to the customer. The server decides whether to ship a complimentary electronic display device 100 to the customer. Alternatively, the server may notify the supplier of the electronic display device of the request and the supplier determines whether to ship a complimentary electronic display device 100 to the customer. This decision may be based on some criteria, like the postal address the user sent, the geographic region the user is likely to accept job listings, the number of users who have electronic display devices in that geographic region, or the number of electronic display devices that have already been given away. If the decision not to ship a complimentary electronic display device 100 to the customer is made, then a message may be sent to the customer informing the customer that of the decision. If the decision to ship a complimentary electronic display device 100 to the customer is made, then step 1340 is performed.
The financial account information may be associated with a checking account, a
credit card account, a money market account, or a PayPal account. The postal address may be a
street address where mail is delivered or a post office box number and the electronic display
device 100 may be shipped using a shipping company, like the United States Postal Service,
Federal Express, United Parcel Service, or DHL. The postal address may also be a street address
where mail is not delivered by the United States Postal Service if the electronic display device
100 is shipped through another carrier like Federal Express, United Parcel Service, DHL, or
another shipping company.

Figure 14 illustrates a flow chart of a method of facilitating an advertising
campaign using an electronic display device 1400 according to a preferred embodiment of the
present invention. First, at step 1410, a person receives an electronic display device by using the
method for distributing an electronic display device 1300 illustrated in Figure 13. At step 1420,
a user creates a user account and registers the electronic display device 100 of Figure 1 by use
the method of registering an electronic display device 700 of Figure 7. Then, at step 1430, users
are selected in response to a job listing for an advertising campaign through the method of hiring
registered electronic display device users 800 of Figure 8. Next, at step 1440, the electronic
displays registered to the selected users are tracked during the predetermined time period given
in the job listing by using the method of tracking an electronic display device 900 of Figure 9.
Finally, at step 1450, the selected users are paid according to the data included in their tracking
location data set by using the method of paying a registered electronic display user 1000 of
Figure 10.

Alternatively, at step 1450 the selected users may be paid according to the method
of paying a registered electronic display user 1100 of Figure 11. Also, a user may receive
payment for generating phone leads according to the method of paying a registered electronic display device user for phone call leads 1200 of Figure 12, after step 1430.

[00135] The present invention solves many of the problems with previous electronic display systems. First, because the electronic display screen 120 does not require power for an image to remain on the electronic display screen, a user need not carry a heavy power source. Also, the user may wear the electronic display screen 120 for a longer time because the system is lighter in weight. The method for hiring registered electronic display users is superior to previous inventions because it does not require hiring of full-time or part-time staff in different geographic locations. People across the country may obtain and bid on jobs making the locations available for advertisers to advertise in much more diverse. Also the method enables the advertiser to get the number of users in a predetermined location for the lowest cost because the users must submit low bids in order to get the job. The location tracking system ensures that users who are paid for jobs are actually performing them at a minimal cost. There is no need to hire full-time managers to check that the electronic display device users are where they should be. For these reasons, the present invention is a vast improvement over previous systems.

[00136] While particular elements, embodiments, and applications of the present invention have been shown and described, it is understood that the invention is not limited thereto because modifications may be made by those skilled in the art, particularly in light of the foregoing teaching. It is therefore contemplated by the appended claims to cover such modifications and incorporate those features which come within the spirit and scope of the invention.
CLAIMS

1. An electronic display device including:
   an electronic display screen, wherein an image remains on said electronic display screen when power is not provided to said electronic display screen;
   a location device that determines a geographic location of said location device, wherein said location device is in proximity to said electronic display screen; and
   a receiver that receives a signal from said location device, wherein said signal provides said geographic location of said location device.

2. The device of claim 1 further including a wearable device attached to said electronic display screen.

3. The device of claim 1 wherein said electronic display screen and said receiver are enclosed by a casing.

4. The system of claim 1 further including a memory device storing said geographic location of said location device.

5. The device of claim 4 wherein said electronic display screen, said receiver, and said memory device are enclosed by a casing.

6. The device of claim 1 further including a transmitter that periodically sends a transmitting signal to said location device during a predetermined time period, wherein said transmitting signal requests a geographic location of said location device.

7. The device of claim 6 further including:
   a memory device storing said geographic location of said location device; and
   a casing enclosing said electronic display screen, said transmitter, said receiver, and said memory device.
8. An electronic display location tracker system including:

an electronic display device, wherein said electronic display device includes an electronic display screen and a location device, wherein said location device determines a geographic location of said location device, wherein said electronic display screen is in proximity to said location device, wherein said electronic display device is scheduled to be in a predetermined geographic location;

a receiver receiving a signal from said location device, wherein said signal provides said geographic location of said location device;

a server comparing said geographic location of said location device to said predetermined geographic location to determine if said geographic location of said location device is in proximity to said predetermined geographic location.

9. The system of claim 8 wherein said electronic display device further includes a memory device, wherein said memory device stores said geographic location.

10. The system of claim 9 wherein said electronic display screen, said receiver, and said memory device are enclosed in a casing.

11. An electronic display device user hiring system including:

a server receiving a plurality of responses to a job listing, wherein said job listing solicits a number of people to wear an electronic display device, wherein a response includes a desired payment amount and an identification code, wherein said desired payment amount is an amount of money a person who sent said response will accept to perform a job described in said job listing, wherein said server selects said number of said responses by choosing said number of responses with a least desired payment amount;
an electronic display device associated with a person who sent a response by an
identification code in said response, wherein said response is selected by said server, wherein an
image is transmitted to said electronic display device.

12. The system of claim 11 wherein said job listing solicits a person to wear an electronic
display device in a predetermined location during a predetermined time, wherein said electronic
display device includes an electronic display screen and a location device, wherein said location
device determines a geographic location of said location device, wherein said electronic display
screen is in proximity to said location device; and

further including a receiver receiving a signal from said location device, wherein said
signal provides said geographic location of said location device, wherein said signal is received
during said predetermined time period, wherein said server compares said geographic location of
said location device to said predetermined geographic location to determine if said geographic
location of said location device is in proximity to said predetermined geographic location.

13. A method for hiring electronic display device users, said method including:

receiving a plurality of responses to a job listing, wherein said job listing solicits a
number of people to wear an electronic display device, wherein a response includes a desired
payment amount and an identification code, wherein said desired payment amount is an amount
of money a person who sent said response will accept to perform a job described in said job
listing, wherein said identification code associates said person who sent said response with an
electronic display device;

selecting said number of said responses by choosing said number of responses with the
lowest desired payment amount.
14. The method of claim 13 further including receiving a job payment amount, wherein said job payment amount is a sum of selected desired payment amounts, wherein a selected desired payment amount is a desired payment amount in a selected response, wherein said selected response is a response selected by said server.

15. The method of claim 13 further including transmitting an image to a selected electronic display device associated with a person who sent a selected response, wherein said selected response is a response selected by said server.

16. The method of claim 14 further including:

   receiving a plurality of signals providing a geographic location of said selected electronic display device during said predetermined time period;

   comparing said predetermined geographic location to said geographic location to determine if said geographic location is in proximity to said predetermined geographic location.

17. The method of claim 16 further including calculating a payment amount, wherein said payment amount depends on a number of geographic locations in proximity to said predetermined geographic location.

18. The method of claim 17 wherein said payment amount is a desired payment amount in said selected response multiplied by said number of geographic locations in proximity to said predetermined geographic location and divided by a number of signals received providing a geographic location.

19. The method of claim 14 further including:

   counting a number of phone calls from a cellular phone to a designated phone number, wherein said cellular phone is associated with said person who sent said selected response, wherein said person who sent said selected response is wearing said selected electronic display
device, wherein said selected electronic display device is displaying said image, wherein a caller from said cellular phone to said designated phone number desires information regarding said image; and

paying said person who sent said selected response in proportion to said number of phone calls from said cellular phone to said designated phone number.

20. A method for tracking a location of an electronic display device, said method including:

receiving a predetermined geographic location and a predetermined time period, wherein said predetermined geographic location is where an electronic display device is scheduled to be during said predetermined time period;

receiving a signal providing a geographic location of said electronic display device during said predetermined time period; and

comparing said predetermined geographic location to said geographic location to determine if said geographic location is in proximity to said predetermined geographic location.

21. The method of claim 20 further including transmitting a signal requesting a geographic location of said electronic display device during said predetermined time period.

22. The method of claim 20 further including:

receiving a plurality of signals providing a geographic location of said electronic display device during said predetermined time period; and

calculating a payment amount, wherein said payment amount depends on a number of geographic locations in proximity to said predetermined geographic location.
Figure 6

Server Memory

Server

Geographic Coordinate Converter

Cellular Network

First Cellular Phone Tower

Second Cellular Phone Tower

Cellular Phone

Electronic Display Screen

Electronic Display Device

Timing Device

This makes it look like all one component

- It isn't in this
- Maybe, understand
Create job listing

Receive and store geographic address, time period, number of users, and image in job listing

Create and store time data set

Publish job listing

Receive and store response in response set

Has the predetermined end time passed?

Store response with lowest payment in the selected set and delete from response set

Is the number of responses stored in the selected set equal to the number of users?

Send message to users who submitted selected responses

Send image and time data set to electronic display device
Figure 9

Receive and store time data set

Does the current time match a time stored in the time data set?

Y

Initiate transreceiver

N

Is the current time later than the last time stored in the time data set?

Y

Receive and store geographic location

N

End
Retrieves tracking location data set and time data set (1005)

Is the number of geographic locations stored in the tracking location data set plus an acceptable missing number less than the number of times stored in the time data set? (1010)

- If 'Y' (1020), then Automatic payment fails
- If 'N' (1025), then Define acceptable area

If 'N', Define acceptable area (1025)

Calculate the number of verified locations (1030)

Calculate the actual payment amount (1035)

Pay the actual payment amount to the user (1040)
Figure 11

Retrieve tracking location data set and time data set

Is the earliest time in the time data set plus an acceptable delay time later than the earliest time in the tracking location data set?

Automatic payment fails

Is the latest time in the time data set plus an acceptable delay time later than the latest time in the tracking location data set?

Define acceptable area

Are the earliest and latest geographic locations received in the acceptable area?

Calculate the number of verified locations

Calculate the actual payment amount

Pay the actual payment amount to the user
Call designated phone number with cellular phone

Store the number of calls to the designated phone number from cellular phone

Calculate the number of false inquiry calls

Calculate the number of phone call leads

Calculate the phone lead payment amount

Pay the user the phone lead payment amount