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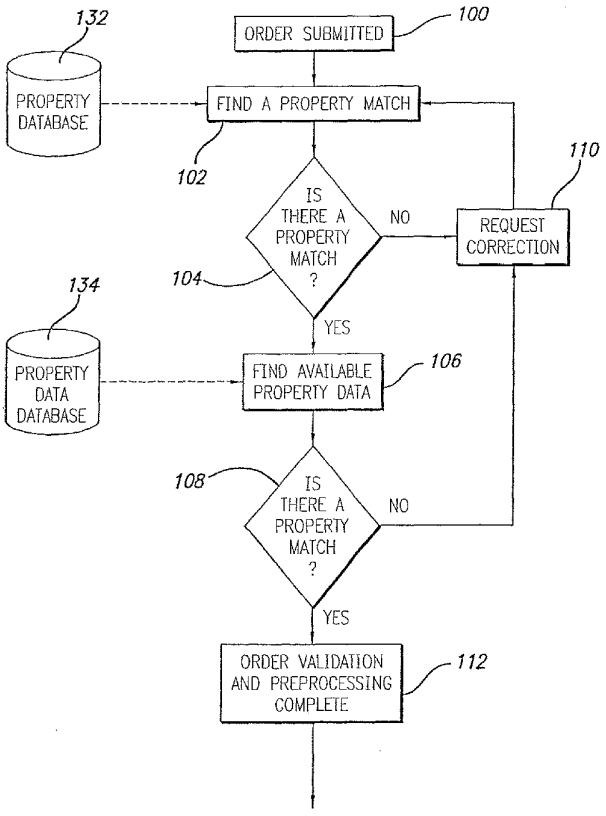
[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR COMPILING DATA FROM PROPERTY TITLE DOCUMENTS



(57) Abstract: A method and apparatus for collecting property data from sources using a mobile device, such as a tablet pc, and to upload that property data to a database. The property data is then proofed and immediately returned to the searcher using the mobile device for error corrections. If there are no errors, the method and apparatus of the invention saves the data and returns the requested property data to the requester. If there are errors, the method and apparatus of this invention requests revisions from the searcher, proofs the order again, and returns the requested property data to the requester.

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Field of the Invention

[0001] The invention relates to real estate valuation and more specifically to a method and apparatus for compiling data from property title documents. The method and apparatus may provide quick and accurate acquisition of title data.

Background of the Invention

[0002] Property title and tax information is valuable data. It is useful to financial institutions such as lenders on real estate and it is useful to real estate purchasers and to agents acting on behalf of real estate purchasers. The typical process by which title and tax data for a subject property is acquired takes a series of days, usually utilizing a fax machine for the request, a title searcher going to a particular public office and requesting information for a subject property, receiving the requested information and then faxing the information back to the requesting party. The information is then verified and input by hand into a database.

[0003] This process usually takes a number of days. Typically, the data is inputted from public records onto a sheet of paper, which is then transmitted by facsimile to a central

repository and which is then inputted by hand into a computer. These multiple steps enable there to be many places in which the data can be incorrectly taken down or inputted. Therefore, there exists a need in the art for a faster and more accurate method of collecting title and tax data for subject properties and inputting that data into a database of collected property title and tax data.

Summary of the Invention

[0004] According to the invention, a method and apparatus are described where title and tax data for a subject property may be collected quickly and accurately. The invention starts when someone requests title or tax data for a subject property. The request for this data is then stored in a database server. The first step, once the order is entered, is to check the current database of properties to see if there is already an up-to-date entry on the subject property or properties. If the entry exists, the data is used to fill in the requested data, if no entry is found, then a search request is created and put in a queue of orders to be filled. A searcher collects the orders in real-time using an internet device that is periodically or persistently connected.

[0005] The searcher then gathers the data, inputting it into a form, such as an electronic form in the preferred

embodiment, which is then immediately sent over the internet to a validation center. The data is then validated to ensure that it is correct and it is then added to the current database of properties and used to respond to the request for title and tax data. The process may be completed within 8 hours to one day of the property data request. It is therefore substantially faster than the prior art, while providing less room for human error.

[0006] The invention improves upon the prior art in numerous ways. The method and apparatus of the invention is faster and more efficient than other prior art methods because the orders may be downloaded by the searcher immediately after they are requested. The invention is less susceptible to human error than prior art methods because there is only one point of data entry and this data is subsequently checked by validation rules built into the electronic form before the order is completed. The invention is also capable of more quickly handling large title and tax data requests, by eliminating unnecessary human interaction which typically slows down the process of gathering data. It is therefore an object of the invention to improve in terms of accuracy and time on all prior art methods. It is a further object of the invention to improve upon the prior art by being able to better handle large volumes of requests more efficiently. It is an additional object of the invention to provide greater accuracy both through single point

of input and subsequent validation of the property data before an order is completed. These and other objects of the invention will be described in or apparent from the following detailed description.

Brief Description of the Drawings

[0007] Figures 1a and 1b are a depiction of a flowchart of the method of the preferred embodiment.

[0008] Figure 2 is a depiction of the series of computers upon which the method of the preferred embodiment takes place.

[0009] Figure 3 is a depiction of an example order queue window and an example city information window.

[0010] Figures 4a-4f are example order forms.

[0011] Figure 5 is an example order form similar to Figure 4a with the addition of comments from a proofer.

[0012] Figure 6 is a flowchart depicting the order creation tables.

[0013] Figure 7 is a flowchart depicting the dynamic generation of a user interface.

[0014] Figure 8 is a depiction of an example mobile device flowchart.

[0015] Figure 9 is an example matrix field.

[0016] Figure 10 is an additional example matrix field.

[0017] Figure 11 depicts a flowchart of the assessment data input process for the searcher.

[0018] Figures 12a and 12b depict an automated proofing of the assessment data.

[0019] Figure 13 depicts a turnaround time report.

[0020] Figure 14 depicts a tablet order tracking summary report.

[0021] Figure 15 depicts a tablet order tracking detail report.

[0022] Figure 16 depicts an order volume report.

[0023] Figure 17 depicts a rejected during order processing detail report.

[0024] Figure 18 depicts a rejected during order processing summary report.

[0025] Figure 19 depicts a rejected during proofing detail report.

[0026] Figure 20 depicts a rejected during proofing summary report.

[0027] Figures 21a and 21b depict an order life-cycle report.

Detailed Description of the Invention

[0028] The invention provides a method and apparatus for compiling property data from title and tax documents and other sources, most notably in-house data stores or 3rd party data stores. These sources can be the electronic sources that make

the new method more efficient. Typically in prior art methods, these sources are not available digitally via the internet or other sources, so searchers are used to gather the data. Using this invention, the data is gathered manually, but input into a remote device that maintains internet connectivity. The data is then uploaded to a proofing database and then stored to be delivered to the data requester as quickly as possible after it is collected.

[0029] Referring first to Figures 1a and 1b, an example preferred embodiment method flowchart is depicted. In the first step of this method, the order is submitted 100. In this step a request is made for title, tax and other information pertaining to a property, typically by web-submission, but requests may also via facsimile or telephone call. If this request is done via the web-submission, it is correctly formatted by the computer accepting the web-submission and is then forwarded on to the next step. If the order is submitted by facsimile or phone, then the order is inputted into the computer before going on to the next step. In the next step, the processing server attempts to find a property match 102. This step is used to standardize the property information so that the correct property is identified for title and tax search. If a property match cannot be found, then the property may not exist or the data requested may incorrectly identify the property. To perform this search, the

processing server attempts to look in a property database 132. The property database 132 is simply a database designed to respond to queries for addresses or other indicia of properties with a "found" or "not found" answer and the formatting (if its different than was submitted) of the property address or other identification for the property.

[0030] For example, if a user input 1234 N. Maple #3 in the first address line, but the property database 132 had two separate inputs, one for address, one for apartment number, it might respond that it has found the property but that the address is not quite right. It might correctly identify the property to find a property match, but would respond that the proper address is 1234 N. Maple and that the proper apartment number is 3, since, in the property database 132, those two fields are separate from one another.

[0031] Next in element 104, the question is: "Is there a property match?" If this question is answered in the negative, the next step is to request a correction 110. If this step is taken, a correction is manually requested, typically by intervention of an individual in the process and then another attempt is made to find a property match 102. If this question is answered in the affirmative, then the method of the preferred embodiment moves on to element 106, which finds available property data. In this step, the property data database 134 is

used to "fill in" information that is already known, for example, about the property, municipality and state. For example, assume that a request has been made for a particular home in the state of New Jersey. In this step, the property data database 134 provides information such as the title office that an individual searcher must go to find the information, its hours of operation, any additional tax information or tax office data (hours of operation, telephone numbers, address) and any information already known about the property. Also in this step, if available, the mobile device to be used for the search is selected, based upon the location of the property for which data is being requested. This mobile device, if available, will receive the order request and address it, as described later in the method as depicted. If a search has been done recently on that property, then possibly all requested data is already known and stored on the property data database 134. All available information of this sort, in an effort to aid the searcher on-site is appended to the order request in this step.

[0032] After this step, the find available property data 106 step, the method attempts to discover: "Is there a property match?" 108. This is to ensure that the property identified in the order exists. If the answer is in the negative, then a correction is requested 110. If the answer is in the affirmative, then the preferred embodiment moves on to the next

portion of the method. In this step, depicted in element 112, the order validation and preprocessing are complete.

[0033] Next, referring to figure 1b, using the preferred method of this invention, it is determined whether or not the order request should be forwarded on to the order queue 114. To determine whether or not to use a mobile device to perform this search, a check is made to determine if a mobile device exists in the area in which the search must be made. A mobile device database 136 is used to perform this check. This database 136 may be housed on the same processing server. If not, then the method may utilize fax or other methods 116 to request the search from an individual searcher in the field. If there does exist a mobile device, then the order is forwarded on to the mobile device order queue.

[0034] At step 118, the order completion process begins on the mobile device after the device accesses and downloads it from the mobile device order queue. This involves the user of the mobile device using the mobile device to receive the order request information from the order queue, proceeding to the proper title searching or tax searching locales, receiving the information, inputting that information into the mobile device so that the mobile device can forward the filled order to be validated. Once the order is completed 118, the order is proofed 120. In the preferred embodiment, this involves an additional

error checking computer, being administered by one or more operators, attempting to identify errors in the submitted completed orders. If an error is found, then corrections are requested 126 and the order is forwarded back to the mobile device 114 for corrections. If there are no errors, the property data from the order is stored 124, typically into the property data database 134.

[0035] Next, the order is finalized 128. In the preferred embodiment, finalizing involves the conversion of the text data into a PDF format for easy delivery to the requester. The filled completed order is sent to the requester 130. In the preferred embodiment, the PDF file containing the results of the order request are sent out automatically using the processing server to the requester's email address. Typically, the entire process will take less than one day if the title searcher can reach the office that day. The method is a substantial improvement over the prior art in terms of time and accuracy.

[0036] Referring next to Figure 2, the apparatus of the preferred embodiment of this invention is depicted. The elements depicted are various components or servers and the mobile device upon which the searcher receives and inputs orders. The first box is the grouping of internal servers 138. These servers are servers that are, in the preferred embodiment of the invention, internal to the order processor. In alternative embodiments,

some or all of these servers may be maintained by individuals or companies other than the order-processor. For example, web servers are typically not maintained internally by businesses, they are instead outsourced to web-hosting companies. Similarly, many databases are maintained in server farms external to the corporations who utilize those servers. For purposes of simplicity, these servers may be maintained and hosted internally by the company which is processing orders.

[0037] The first component used in the preferred embodiment of the method of this invention is the processing server 140. The processing server 140 performs a great many functions in the process. The first function that it performs is to determine which orders have come in by checking the web server 142 database and forwarding those orders, if possible, along to the database from which the remote devices "pick up" their orders, from the order queue in the processing server 140. This database, in the preferred embodiment, is maintained on the processing server 140. In alternative embodiments, this database may be included on an additional server or servers. The processing server 140 also checks with the web server 142 database to determine when new orders have come in via the website through a new order request 139. Additionally, the processing server 140 sends orders to the property database 144 to determine if the property data has been entered correctly in

the order itself. The processing server receives the "property match" and determines whether this property is properly identified. The processing server 140 database of orders to be "picked up" by the mobile device 150 also called the "order queue" is a listing, subdivided by the municipality or area in which the search is to be performed, where the mobile device may check to pick up new order requests.

[0038] Once the order has been filled, the processing server 140 of the preferred embodiment also maintains access to a database of completed orders prior to those completed orders being added to the property data database 146. These non-proofed orders are held until they are proofed at which point they are added to the property data database 146 as new property data. Finally, the processing server 140 interacts with the completed order data stored in the property data database 146 to send the data using the internet 148 in response to the order request 139.

[0039] The second component in the preferred embodiment is a web server 142. The web server 142 is responsible for receiving the web-created order requests. There may be additional error checking rules on the web server 142 to ensure that all relevant data is input properly to the order. For example, there may be requirements that the zip code for a particular property be inputted by the user. Additionally, there may be requirements that a zip code be 5 or 9 characters long, so

as to conform to the requirements of the property database 144. The web server 142 maintains a database of current order submissions that will be accessed by the processing server 140 to gather the new orders before they are sent to the mobile devices 150.

[0040] The next component depicted is the property database 144. This database is a master file for addresses and properties that are accessible by the method of this invention. This property database 144 may or may not be maintained internally. The property database 144 may be an external service to which the user of this invention is granted access. The address or property for which title and tax information is requested is checked against this database to ensure that the property exists and that it is "findable" by another server. If the address is incorrect or partially correct, this database is used to correct this mistake or if that is not possible it will be used to notify a user of the system to correct this address or to request further clarification of the property for which the order request was made.

[0041] Another component of the apparatus of the preferred embodiment is the property data database 146. This database maintains data related to properties, such as information about the address, phone number, hours of operation, individuals to contact for information pertaining to a title

search in a given municipality or county. Additionally, this database maintains state-specific and order specific information based upon a series of tables which maintain information for inclusion in the order requests that are downloaded by the mobile device 150. An example of some of the data that may be contained pertaining to a state or municipality is depicted later in Figure 4. Additionally, the property data database 146 stores information on the particular property for which an order request was submitted. If a search has been completed recently or some data is concerning the property for which the data is requested has been previously available, this data will be added to the order request such that certain portions of the order to be filled in by the searcher are already filled in, subject to amendment by the searcher.

[0042] The next three components are the internet 148, the mobile device 150 and property data sources 151. In the preferred embodiment of the invention, the internet 148 is used to transmit data to and from the mobile device. In alternative embodiments, proprietary networks or other means of transmission to and from the mobile device may be used. In the preferred embodiment, the mobile device is connected to the internet persistently via a wireless internet access card. In the preferred embodiment, this card is a network access card which uses cell phone connectivity technology. In alternative and

future embodiments, this may be another version of wireless internet access, such as an extension of the 802.11a-g protocols or successor standard protocols. In alternative embodiments, the mobile device 150 may be connected or "synced" at the end of the day via a hardwire or wired network connection using a home or other computer system.

[0043] In the preferred embodiment, the mobile device 150 is a tablet pc equipped with an always-on cell phone connectivity wireless air card. In alternative embodiments, the mobile device 150 may be a regular notebook personal computer, a handheld personal computing device, such as a Palm® or PocketPC® device. Alternatively, the device may even be a wireless-enabled cell phone or smart phone. In other embodiments, the mobile device 150 may be a custom device containing at least the ability to wirelessly connect or to repeatedly via wired connection interact with the internet 148 and which is capable of utilization by the searcher to fill in forms or to update data on the internal servers. The forms may be filled in or updated using a tablet pen, a keyboard, a voice recognition system, an electronic gathering system, as well as other devices or systems. Finally, the property data sources 151 are the numerous sources from which property data is gathered based upon the order forwarded to the mobile device upon order download request. These sources can include, but are not limited to: county title offices, county tax

assessor's offices, public utilities offices, county abstract offices or other sources of property data as requested by the order.

[0044] Referring now to Figure 3, an example new order queue is depicted as it is seen from the mobile device 150. In the preferred embodiment, the order queue that is received by the mobile device 150 is viewed via a client server application which resides on the searcher's tablet 152. This is good for numerous reasons, most notably, that the orders can be worked on by the searchers offline, without having the need to connect to the Internet. The use of web-based applications is well-known in the art and its other benefits are also well-known. Depicted in element 154 is the city of Pleasantville City in Atlantic, New Jersey. Clicking on an order in the order grid 156 provides a screen or window 158 that displays information about the tax collector, water, sewer and refuse for the city or town desired.

[0045] Also depicted in Figure 3 are the orders pending for Westfield Town and Madison Borough. These are depicted in element 156. Similarly to Pleasantville City depicted above, information about these areas may be seen by clicking on an order in the order grid depicted in element 156. These help an individual searcher to perform their job searching for these titles and tax records more quickly and efficiently.

[0046] An example of the information about the tax collector is shown in Figure 3. This information changes whenever an order is clicked once in the order grid 156. Furthermore, if the user of the mobile device selects a specific city (or town) from the dropdown box 172, the city (or town) information reflects the selected city (or town). This figure depicts data that may be relevant to a searcher who will be performing a job in the town/state or county. As can be seen in element 158, this section refers to Pleasantville City, Atlantic, New Jersey. Various information for relevant county or city facilities are depicted. For example, the tax collector and water department are depicted in elements 180 and 182, respectively. So, for the tax collector 180, the address is depicted in element 174, to aid the searcher in finding the proper office in which to search for tax data. Additionally, the hours of operation and contact information for the office is shown in element 176. Procedures are depicted in element 178, for example, the tax collector prefers that requests for information on a property be submitted using a computer in the assessors office where the logon is "Tax" and the password is "Look". For the tax office, which is very busy around tax time, there is a tax lockout, as shown in element 177. Also depicted in element 179 is the tax assessor's name, phone number and hours. Similar groupings of data are depicted on the folder tabs

such as water, sewer and refuse depicted in elements 182, 184 and 186.

[0047] Referring now to Figures 4a-4f, example order forms, as seen on the mobile device, are depicted. These order forms can be a stand alone or web-enabled application. The due date for the order request is depicted in element 192, the order number is shown in element 194. The date on which the order was placed is shown in element 196. The first major block of information is the physical information about the property, as shown in element 198. For example, the owner's name is requested in element 200 and the mailing address for the owner is requested in element 202. To the extent this data is available before the searcher receives the order, it will be filled in by the processing server. Finally, a button is included at the end of this and every section for completion of that section. This button is shown in element 204 as "Done." This button will make sure that valid responses are made in each required portion of the form. This performs very basic error checking such as ensuring various fields have numbers only, or that various values add up to a predetermined sum amount.

[0048] The next sections, depicted in elements 206 and 207, are devoted to the land value, improvement value, abatement, total value, and amount of taxes billed, paid and owed on the property in the last several quarters. These sections, as in

other sections, has done and validation buttons, depicted as elements 208 and 209. The searcher will input the values from the tax assessor's office into the portions of this form which will then be validated before moving on to the next section. The next section is for assessments, as depicted in element 210. The searcher will look for tax assessments made against the property and input the value of any assessments and any comments in this section.

[0049] Element 212 depicts the utilities section. Here, the user of the mobile device inputs collected data pertaining to utilities for a property. This section, as in prior sections, has a Done button 214. This is used to ensure that the data has been input correctly, by ensuring various fields contain only numeric values, etc. Next, in element 216, a section devoted to liens is depicted. The user of the mobile device inputs data related to liens that may be on the property. Additional remarks may be made in this section. Any special information may be made in the section denoted by element 218. Any unconfirmed assessments may be made in the section denoted by element 220. Finally, the date the search was done, the searchers initials, and the searchers comments are input by the searcher in boxes or elements 222, 224, and 225, respectively. The searchers comments allow the searcher to communication about the order back to the proofer.

[0050] Once the user is done inputting the data, there are three options. One, the user may submit the document 226, at which point the web form attempts to submit the data using the web. Alternatively, if an internet connection is not available, the submit button 226 saves the data for a later attempt to be submitted when an internet connection is available. Alternatively, the user may cancel the submission by clicking the button available in element 228. Finally, the user may click the hold button in element 230 to save the data temporarily for later submission. It is to be understood that the display and web forms depicted in Figures 4a-4f are only examples. Differing web-pages may be used with only some or one of the sections depicted in Figures 4a-4f. In the preferred embodiment of the invention, only sections for which information was requested by the order are shown to the searcher. So, for example, if the search order request did not wish to see data about utilities 212, that entire section will be left out of the example order form. Alternatively, a web-enabled application designed to run on the mobile device or a different web-form may be used to fill the order requests. Any application or hard-coded device capable of quickly collecting this data from the field and forwarding the data on to be proofed, saved and completed may be used.

[0051] When an order is submitted, data is drawn from numerous sources in order to create that order. As seen in

Figure 3, for example, data pertaining to the various offices in which data may be gathered is included, for the benefit of the remote user, in the order request. This type of data comes from a file server with a series of XML files. Within the order creation system is the database with the series of tables. Tables are locations from which data may be drawn.

[0052] In one embodiment, the order may be submitted for proofing. The proofer can reject the order and give one or more reasons for the rejection. When the searcher receives the rejected order, the searcher can view in a special instructions window 231 the proofer's comments as to why the order was rejected. For example, "Please fill in the entire utility section." The special instructions window 231 may also include a Client Note from the client that ordered the search. The Client Note is a note from the client indicating what the client would like for the order that he/she requests. The special instructions window 231 may also show the searcher whether the search is an Amended Search (i.e., a search that was already sent to the client or customer but needs further information and will be resent once that information is collected). The special instructions window 231 may also show the searcher Interest Details. The Interest Details may include whether or not to collect interest, if interest is to be collected, the dates on which the interest should be collected, etc. The special

instructions window 231 provides information to the searcher regarding how to fill out the order, collect information, etc. The searcher can also attach his or her own comments in box 225 to the order for the proofer to read. This provides one way the searcher and the proofer can communicate.

[0053] So, referring now to Figure 6, a flowchart depicting the various XML files used in creating an order is depicted. So, for example, a new order 232 comes into the system via the website. Based on the location of that property, various data may be gathered.

[0054] So, data from element 234, the all remarks table, is added. This data may be stored locally on every mobile user's unit. Each time an order is loaded on the mobile device, the file store is queried for the latest information and it is incorporated into the form. The data in the XML files is data such as contact information for the office in order to correct errors in the order. This also typically includes the overall format of the form (in the preferred embodiment) as depicted in Figure 5. To populate this data table, for each order, additional data is requested from the statewide remarks XML file 236 and the municipal remarks XML file 238. These two XML files contain state and municipal specific remarks for the day or hour or week. This can include information such as a new utility company that stores utility information for a specific town.

Next, in element 240, the XML file with municipal specific data is depicted. This XML file contains municipal specific data that is included, such as local municipal contact data for each office to be contacted for gathering all or a portion of the information requested in the order. The table of searchers and towns serviced, in element 242 is also used in the preferred embodiment, to determine to whom this order will go for searching. This table contains data such as which searcher has which mobile device and which municipalities are serviced by a particular searcher and mobile device. Therefore, when the order is created, the search request will go to the proper searcher for quick completion. The system and method can reassign orders or towns between searchers. For example, if a searcher is ill, his or her order can be redirected to another available searcher. This redirection operates seamlessly with the mobile device and can work in cooperation with a web-based order management system.

[0055] Finally, the XML file of clients and client specific form preferences file 244 is used to provide the user of the mobile device with client specific information such as what to collect along with each orders. This is all handled when each order is already on the mobile device and the order is loaded up by the user of the mobile device. The final step is to put the completed order in the order table, or queue, for pickup by the searchers upon connection to the system.

[0056] Referring next to Figure 7, a depiction of the user-interface generation internal to the method of this invention is depicted. This process is used to create the user interface, such as that depicted in Figures 3 through 5b. The user interface is customized to the property, the customer requesting the property information and the location of the property, based on data contained within various database tables and XML files, as shown in Figure 6. So, to generate the user interface that the mobile user will see, the first step is the new order being submitted in element 250 and downloaded by the mobile user to the tablet. Once the order is downloaded and then loaded up by the mobile user on the mobile device, the user interface generation process asks which municipality 252, which property 254, what was ordered, and which customer 256. Each of these four questions help to determine the user interface that is presented to the mobile user. The questions which municipality and which property combine to create a matrix 258, which is used to select the specific details which are displayed. For example, for one municipality and property there may only be one office from which all information may be gathered, therefore, only one contact information is displayed for that "matrix." However, in alternative municipality and property combinations, contact information for several offices may be needed. For example, there may be separate offices for tax and title information,

where the information for each office needed to fill the order would be provided in the order request to be picked up by the mobile device from the order queue. All relevant information for various offices will be displayed in the order request once it is downloaded by the mobile device. In that case, the matrix yields a different user interface.

[0057] Next, the "what was ordered?" question is answered in conjunction with the "which customer?" 256 question and the order entry from the web site settings 260. These order entries from the web site settings are settings inputted by the individual placing the order request. These settings may alter the required data, such as not requiring assessment data about a property or not requiring utilities data for a property. Also included in this step are customer remarks and rules 262. These remarks and rules may be specific, such as a request to get only assessment data for a particular period of time. Once the matrix 258 of municipality and property determines what applies to the order], the municipality-specific remarks and rules 264 are added along with property remarks and rules 266. These rules may be related to the data that may be gathered in a particular municipality or property, such as what data is available. If certain data is unable to be found, the user interface removes input blocks or requests for that data. Finally, the user interface is generated 268, using all of these matrices and data.

Once the user interface is created, the order is loaded on the screen for the tablet searcher to input all information.

[0058] Referring now to Figure 8, an example mobile device flowchart, depicting the steps taken on the mobile device of the preferred embodiment. In the first step, the mobile device is started up 272. In the preferred embodiment, this is turning on the tablet personal computer. In alternative embodiments, the device may be "always on" or may only require that the "internet" be enabled by enabling or inserting a network device. The next portion of this flowchart is a decision tree to determine whether there is internet capability 274. This box is used to determine if the mobile device is capable of using the internet to contact the order queue and databases. If there is internet connectivity, then the mobile device with query and save new orders to the local order store 276. The local order store 282 is a database local to the mobile device, for storing the orders designated for a particular device. The step depicted in element 276 involves contacting the web server in order to receive the orders from the order queue in the processing server 140 in Figure 2. The orders that are for the particular mobile device will be flagged, in the preferred embodiment with a unique identification number, and only those order requests will be picked up by the mobile device and added to the local order store 282.

[0059] The mobile device also uploads completed orders to the electronic proofing system 278 to be proofed. These orders are orders that have previously been completed. Once these orders enter the proofing stage, this is the end of mobile device processing 280, unless the order is returned to the searcher via being rejected by proofing. This process can occur in real-time as the individual is using the mobile device. So, for example, as the mobile device is used to complete one order, another order for data from that same property data source may enter the order queue. Once the order being done is completed, it will immediately be uploaded for proofing 278, while the device simultaneously downloads new orders including the order for data from the same property data source. One of those new orders may be for the property data source in which the user is working, in which case, it may be completed before the mobile device operator moves to a different office. This instant-update connectivity is much more efficient than the prior art facsimile order requests and enables the user to work faster on all current jobs.

[0060] If there is no internet capability 274 or the orders have been stored to the local order store 282, the application is loaded 284 on the mobile device. This application may be the only built-in application or may be one of many, if the mobile device is a tablet pc, as in the preferred embodiment. If there are any jobs in the local store, with or without

internet capability, the searcher (mobile device operator) then selects a new or saved form 286. These forms are the forms for each order in the local order store 282. The form is dynamically generated, previously in the preferred embodiment, based on the municipal-specific rules 288. If work has been previously done or the order has been partially filled, this form will have been saved in its partially-completed state. Any available fields have been or are populated with available data 290. This step is the step in which the searcher actually requests data from a property data source and inputs the response data into the mobile device. Available data is then stored, using the temporary storage function shown in element 230 of Figure 5b. If the searcher needs to move to a different office to receive additional data, this "hold" button 230, in Figure 5b, will hold the data already input until the searcher arrives at the other property data source. This "hold" button 230 saves the state of all form data, so that the remaining data may be filled-in once the searcher arrives at the next property data source.

[0061] Once all available data has been gathered, the form is saved when completed 292. The device then determines if there is internet capability again, in element 294. If so, the completed order(s) are uploaded to the electronic proofing system 278 which ends the mobile device's processing 280. If there is no internet capability 296, then the mobile device saves

completed orders to the local order store 296. The local order store is depicted in 298, but is the same local order store depicted in element 282. The mobile device then periodically checks to determine if there is internet capability 294 so that it may upload the completed orders to the electronic proofing system 278 and end the mobile device processing 280.

[0062] Referring now to Figure 9, an example matrix field is depicted. Matrix fields and the rules contained within them are applied prior to an order being uploaded to the order queue. For example, in Figure 9, element 300, the matrix field being applied is used to determine, before an order is sent to the order queue, whether a particular municipality is capable of automated order queuing and searching. In some municipalities, automation may be unavailable, though, in the preferred embodiment, automation is available in all municipalities. The matrix then determines if a rule should be applied in element 302. The response in element 302 is "yes." Therefore, in element 304, if automation is available, it is used by the preferred method of this invention. This means that the order would then be queued up in the order queue.

[0063] Referring now to Figure 10, an additional example matrix field is depicted. This matrix field I used to determine if Bankruptcy Billing that requires research is present for this property 306. If the property has bankruptcy billing that

requires filed research 308, then a rule is applied to the data. The rule that is required is shown in element 310, it is to send the order to the mobile device for manual research. This means that the searcher's screen will have a special section for additional bankruptcy billing research that must be done by the searcher in order to complete the order.

[0064] Referring now to Figure 5a and 11, the input of assessment data is depicted. First, in element 210, the section of the input mechanism for the searcher that is used for inputting assessment data is depicted. This section begins with only a single forth quarter being required. The process depicted in Figure 11 may dynamically add additional input blanks to the web application shown in Figure 5a and 5b. So, at the beginning of added assessments 312, the searcher may input the added assessment 314, if one exists. If there are none, then this is the end of the added assessments section 330. If there are added assessments, then the searcher must determine if the searcher wants to add/omit assessments 316. This means that the searcher may add additional quarters of assessments or remove prior one's that they have added. If the answer is yes, then the searcher enters the amounts and payment statuses for all relevant assessment periods 318 and the number of months is automatically made into twelve 320. If the answer is no, then the searcher inputs the number of months 322. If the number of months are not

between 1 and 12, then there is an error and the searcher is prompted telling them that there must be an add/omit if the number of months is greater than 12, depicted in element 324, and returns to element 316. Alternatively, if the number of months is between 1 and 12, then the added assessment figures are entered 328 and this is the end of the added assessments section 330.

[0065] Next, depicted in Figures 12a and 12b is an added assessment proofing flowchart. This is an example of a portion of the proofing process that takes place before the order is finalized and sent to the requester. This step takes place as the assessment data is received from the searcher. In this exemplary portion of the proofing process, the first step is to begin the process of added assessment proofing 332. In the next several steps, mathematical calculations are used to verify the added assessment values. First, is the added assessments value equal to $0, as requested in element 334. If yes, then the added improvement value is set to $0, as shown in element 336, and the added improvement value is stored 344. If the added assessments value is not $0, as requested in element 334, then the monthly added assessment amount is set to equal the added assessment amount divided by the number of months 338. Next, the monthly added assessment amount is multiplied by 12 which is then saved as annual added assessment amount 340. Next, the annual added

assessment amount is divided by the tax rate to reach the added improvement value 342. This value is stored as the added improvement value in element 344.

[0066] Next, the most recent taxes are added to the abatement amount times the tax rate which are then added to all deductions. This value is then divided by the tax rate. Finally the land value is subtracted and this yields the original improvement value 346. This value is stored in element 348. Next, the added improvement value is added to the original improvement value to equal the new improvement value 350. The proofing test comes next. Does the total value equal the land value plus the new improvement value, as shown in element 352? If not, then the order is incorrect and the order is returned to the searcher to make corrections 354. If it is correct, then this is the end of added assessment proofing 356.

[0067] Additional rule-sets and proofing can take place for each portion of data that is delivered by the searcher. Additional proofing is performed in the preferred embodiment to ensure that tax calculations are performed correctly, that if certain boxes are checked "yes" then the data pertaining to those boxes is also filled in, or determining if the value of the land as input makes sense in light of other input data. These and other validations are completed during the proofing process of the preferred embodiment. Once the proofing process is

completed, the property data is stored to the property data database 146 (see Figure 2) and is then returned to the property data requester.

[0068] The preferred method of this invention provides for numerous reports and tables to be generated from data that may be gathered using this invention. These reports and tables may be used to further refine the process or to monitor the success and efficiency of particular searchers or counties. Additionally, the reports may be used to determine which areas are capable of using all or portions of the method of this invention at any given time.

[0069] Referring now to Figure 13, a turnaround time report is depicted. This report is useful for determining the percentages of completed orders that are taking place over given time-periods. A date range is depicted in element 358. This range may be set for any period of time over which orders are received and outstanding. There is also a location depicted in element 360. In this example All New Jersey Municipalities is depicted. This may also be changed to any section or subsection from which orders are being requested and received. The example table depicted shows that a particular municipality 362 is in the left-hand column. The first municipality is Absecon, as shown in element 364. For each municipality, cumulative percentages and actual numbers of completed orders are given as seen in elements

366 and 368 where 6 completed orders and 60.00% of outstanding orders are delivered, respectively within 3 hours.

[0070] At the bottom of this chart, the totals 370 are given for all municipalities. In the example chart, only two municipalities are depicted, but in the preferred embodiment, multiple municipalities will be shown. The total completed orders in hour 6 after their request was 10, as shown in element 372 and the total completed ordered is 31 (6 + 15 + 10). The total cumulative percentage in hour six after request is 77.50%, as seen in element 374. After 2 days, 90.00% of orders are completed, as seen in element 376. This report may be used to determine the length of time needed in individual municipalities and overall to complete orders using the method of this invention.

[0071] Referring next to Figure 14, a tablet order tracking summary is depicted. This table order tracking summary is useful as a quick-glance reference for the status of a given remote device. In this example report, the searcher Sam Smith, shown in element 386 is shown. Sam Smith has been assigned the remote device (in this case a tablet pc) numbered 0001, as shown in element 388. Contact information for Sam Smith is also shown in element 390, such as cell, home and fax numbers. The report is useful for determining how active a searcher or device has been recently. So, for example in element 392, it can be seen

that the territory (typically municipality, but may be smaller or larger) is 16. The total number of orders in the system, as seen in element 394, is 24. Therefore, the percentage of orders in the queue versus those in the system is 66.6% (16 / 24) as shown in element 396. The discrepancy occurs then the remote device has not recently downloaded new orders and uploaded completed orders. The last download time and elapsed time since last download of new orders can be seen in element 398. The last upload time and elapsed time since last upload may be seen in element 400. This report may be useful in tracking overall order progress, total orders and download/upload activity assigned to a searcher.

[0072] Referring now to Figure 15, a tablet order tracking detail is depicted. In this view, the reviewer can see the individual orders that are outstanding and completed for a searcher and receive a more detailed view of their status. This example again uses Sam Smith, as shown in element 402. Sam is still using Tablet #: 0001, as shown in element 404. The order number NAM-04-2019 is shown in the row denoted by element 406. This order was downloaded at 09:05AM, as seen in element 408 and was completed, as seen in element 410, at 12:15PM, as shown in element 412. The total elapsed time is shown in element 414 as 3H, 10M or three hours, ten minutes. However, order number NAM-05-3342, as shown in the row depicted in element 416 is still

outstanding, as seen in element 418. The total elapsed time, shown in element 420, is currently 4H, 45M or four hours, forty-five minutes on this order and it is not yet complete.

[0073] Referring now to Figure 16, an order volume report is depicted. This report shows the volume of orders for each municipality. The example report depicted shows only three municipalities, but in the preferred embodiment, all cities in a given area will be displayed. The first element, element 422, shows the date range on the volume report. This may be set to any range so as to get a short-time-frame understanding of the volume of orders or a long-time-frame understanding. Element 424 depicts Absecon City and shows that for the date range given, there were 25 orders, shown in element 426. Next, Brigantine City is depicted in element 428. For this city, there were 13 orders, shown in element 430, for the date range selected. In total, for these three cities shown, the number of orders was 128, as shown in element 432.

[0074] This report may be used to determine if a given municipality needs additional searchers in order to handle the total number of orders. Alternatively, it may be used to move searchers from place to place given an unusually high influx of orders for a particular municipality or a particularly low number of orders in another. Additionally, the report may be used, given specific date ranges, to determine when large volumes of

order requests are coming in or when small volumes are being requested. It is also useful for comparing total order requests across municipalities.

[0075] Referring next to Figure 17, a rejected during order processing detail report is shown. This report details all the rejected orders during processing before the orders are sent to the remote device for completion. The first order, numbered NAM-04-2019 in this example, denoted by element 434 was rejected because no match in property master file 436. This means that the property for which a title/tax search was requested could not be found. The second example rejected order, order number NAM-05-2254 in element 438 is rejected because no match was found in the property data database 440. This means that the property was found in the property master file, but was unable to be found also in the property data database. The likely reason these properties were not found is that they were input incorrectly by the order requester.

[0076] Referring now to Figure 18, a summary report of the type of data displayed in Figure 17 is shown. In this summary report, the data range is one month from June 1, 2005 to July 1, 2005, as shown in element 442. The summary report also shows the total number rejected due to the failure to find them in the property master file within the property database. The total number rejected for this reason is 125, as shown in element

444. Next, the total rejected due to no match being found in the property data database is shown as 63 in element 446. Finally, the total number of orders rejected due to a different owner's name being on the property was 7, as seen in element 448. The total number of rejections may be seen in this report as 195, in element 450.

[0077] Referring next to Figures 20 and 21, similar reports are depicted for orders rejected during proofing, both detail and summary, respectively. In Figure 19, the date range is again depicted in element 452. It may be changed to suit the needs of the reviewer from a very short period of time to a very long period. The order number NAM-04-2019 is shown in element 454. It has been rejected during proofing for the reason shown in element 456, the searcher failed to input a water comment. The order shown in element 458, numbered NAM-05-2254 was rejected during proofing because there was a math error in the taxes section of the order, as shown in element 460. Referring now to Figure 21, the same date range is shown in element 462, for this summary report. The total number of rejections during proofing given for each type of rejection is shown in this report without regard to the individual order numbers or clients or the municipality in which the order was filled. So, for example, the total number of orders rejected for missing water comments was 6, as shown in element 464. The total number of proofing rejections

due to math errors in the taxes section was 13, as seen in element 466. In this example only a few errors are shown, but in the preferred embodiment, numerous types of errors may be present all of them subdivided by the type of error. Finally, the total proofing rejections is shown in element 468 as 19. This report can be used to determine the accuracy of data gathered and where there may be potential errors, such as math errors in taxes which need refinement or additional training for searchers to gather the information.

[0078] Finally, referring to Figures 21a and 21b an order life-cycle report is shown. This report is very useful for tracking the entire life of an order and the time it takes to complete a single order and orders on average. The order life-cycle report shown in Figures 21a and 21b is abbreviated so that it may be more easily understood for exemplary purposes. An actual order life-cycle report, depending on the length of time and number of searchers reported may be very long or very short. In element 492 the date rage from 8/17/2005 to 8/22/2005 is shown. This is a relatively short time-period accounting for orders received and completed between those two dates. The search is further limited by element 494, the individual searcher, in this case Linda Loving. Therefore, this order life-cycle report is for a short time-frame for a single searcher, Linda Loving. Alternative embodiments of an order life-cycle

report could be made for much longer periods of time, such as entire months, fiscal quarters or years, and could be for single or groups of searchers based upon any number of division criteria.

[0079] The preferred embodiment of the order life-cycle report may only be created using the method of this invention or one significantly similar. A computer tracking each input-time and proof-time and completion time for each step is able to accurately determine the times at which these events occur. The columns depicted in the preferred embodiment of the order life-cycle report are time ordered 496, time order downloaded by searcher 498, time order uploaded from searcher 500, the time order proofed by proofer 502, time order was completed for customer 504 and total turnaround time 506. All of these columns will be described in the following paragraphs.

[0080] For the order depicted in element 508, order number 1942658-T, received on 8/18/05, the time the order was received was 10:44:48 AM, as seen in element 510. The time ordered is the exact time-stamp from the website, fax or phone call received in which the order was passed into the system. Next, the time the order was downloaded by the searcher was 12:10:46 PM, as seen in element 512. This is the time it took for the searcher to connect, after the order was created, and to download the order request to his or her mobile device. As also

seen in element 512, the elapsed task time and cumulative elapsed time are both 1 hour, 26 minutes. These two numbers are spread throughout the order life-cycle report in order to see how long each step and the total transaction is taking at any point along the way.

[0081] Next, the time the order was uploaded from the searcher is shown as 04:09:27 PM in element 514. Also shown in element 514 are the elapsed task time of 3 hours, 59 minutes and the cumulative elapsed time of 5 hours, 25 minutes. So, this portion of the task, between downloading the order and uploading the completed order took 3 hours, 59 minutes. This information can be used to optimize the process and to determine which searchers and locations take the longest to complete orders. Additionally, it may be used to determine when additional searcher are needed and to give accurate estimates of the time required to complete an order. Next, the time order proofed by proofer is shown as being completed at 04:11:46 PM in element 516. The elapsed task time is 0 hours, 2 minutes and the cumulative elapsed time is 5 hours, 27 minutes in element 516. The next section is for the time the order was completed for the customer. The time the order was completed for the customer was 4:11:46 PM a cumulative elapsed time of 5 hours, 27 minutes after the order was placed. This number is also shown in element 520 under total turnaround time.

[0082] In addition to the individual order-by-order listing in the order life-cycle report, the average elapsed time 522 and the average cumulative time 524 are also shown at the bottom of any order life-cycle report. So, for the time order downloaded by searcher column, there is an average elapsed time of 13 hours, 12 minutes as seen in element 526. For the time the order uploaded from searcher, there is an average elapsed time of 20 hours, 41 minutes, as seen in element 528. For time the order was proofed by the proofer, there is an average elapsed time of 0 hours, 10 minutes as seen in element 530. Next, in element 532 the average elapsed time for the order to be completed for the customer is shown as 13 hours and 32 minutes. Therefore the average total turnaround time for each step is 13 hours and 32 minutes.

[0083] The next row shown in Figure 21, is the Average Cumulative Time as shown in element 524. The average cumulative time to download the order by the searcher is 13 hours, 12 minutes, as seen in element 536. This row depicts the average cumulative time for every order. The average cumulative time to upload the order from the searcher is 1 day, 9 hours, 53 minutes as seen in element 538. The average cumulative time to proof the order by the proofer is 1 day, 10 hours, and 3 minutes as seen in element 540. The average cumulative time the order was completed for the customer, shown in element 542 is 1 day, 10 hours, 3

minutes. Therefore, the average cumulative total turnaround time for any order is 1 day, 10 hours, 3 minutes, as seen in element 544. Thus, for this searcher in this time-frame, the average total turnaround is roughly a day-and-a-half.

[0084] In describing preferred embodiments of the present invention illustrated in the drawings, specific terminology is employed for the sake of clarity. However, the present invention is not intended to be limited to the specific terminology so selected, and it is to be understood that each specific element includes all technical equivalents which operate in a similar manner. Furthermore, the inventors recognize that newly-developed technologies not now known may also be substituted for the described parts and still not depart from the scope of the invention.

[0085] Portions of the present invention may be conveniently implemented using one or more conventional general purpose or a specialized digital computer or microprocessors programmed according to the teachings of the present disclosure, as will be apparent to those skilled in the computer art. Appropriate software coding can readily be prepared by skilled programmers based upon the teachings of the present disclosure, as will be apparent to those skilled in the software art. All or portions of the invention may also be implemented by the preparation of application-specific integrated circuits or by

interconnecting an appropriate network of conventional component circuits, as will be readily apparent to those skilled in the art based upon the present disclosure.

[0086] The present invention includes at least one computer program product which is in a storage medium (media) having instructions stored thereon/in which can be used to control, or cause, a computer to perform any of the processes of the present invention. The storage medium can include, but is not limited to, any type of disk including floppy disks, mini disks (MDs), optical discs, DVD, CD-ROMs, micro-drive, and magneto-optical disks, ROMs, RAMs, EPROMs, EEPROMs, DRAMs, VRAMs, flash memory devices (including flash cards), magnetic or optical cards, nanosystems (including molecular memory ICs), RAID devices, remote data storage/archive/warehousing, or any type of media or device suitable for storing instructions and/or data.

[0087] Stored on any one of the computer-readable medium (media), the present invention includes software for controlling both the hardware of the general purpose/specialized computer or microprocessor, and for enabling the computer or microprocessor to interact with the human user or other mechanism utilizing the results of the present invention. Such software may include, but is not limited to, device drivers, operating systems, and user applications. Data used by the software may be retrieved from different sources (local or remote) and either permanently or

temporarily stored (before, during or after processing) by utilizing any of the text files, delimited files, database(s), or other storage techniques. Ultimately, such computer-readable media further includes software for performing the present invention, as described above.

[0088] Included in the programming (software) of the general/specialized computer(s) or microprocessor(s) are software modules for implementing the teachings of the present invention, including, but not limited to, uploading property data requests to a database, using a mobile device to download those property data requests, inputting property data into the mobile device, uploading property data to another database, software used to review the property data for errors, and providing that property data to the customer. Obviously, numerous modifications and variations of the present invention are possible in light of the above teachings. It is therefore to be understood that within the scope of the appended claims, the invention may be practiced otherwise than as specifically described herein.

Claims

What is claimed is:

1. A computer-based method of gathering property data comprising the steps of:

uploading property data requests to a first computer database;

selectively downloading the property data requests using a mobile device based upon an area covered by the mobile device;

collecting property data from various sources;

inputting the property data into the mobile device;

uploading the property data from the mobile device to a second computer database; and

proofing the property data for an error.

2. The method of claim 1 further comprising the step of gathering information for the property data requests from in-house or 3rd party sources.

3. The method of claim 1 further comprising the step of storing the property data in a third computer database.

4. The method of claim 1 further comprising the step of delivering the property data to a requester.

5. The method of claim 1 wherein the selectively downloading step takes place using a wireless or wired connection.

6. The method of claim 1 wherein the inputting the property data into the mobile phone is performed via an electronic form that is similar to a paper form.

7. The method of claim 1 wherein the mobile device is a personal digital assistant or a tablet pc.

8. The method of claim 1 further comprising the initial step of checking that the property for which the property data request was generated may be located within a property database.

9. The method of claim 1 wherein the proofing step includes validation of the data for accuracy at a time before and after an order has been submitted.

10. The method of claim 8 further comprising a second step of checking that property data for the property for which the property data request has been made does not already exist within a property data database.

11. A property data retrieval method comprising the steps of:

submitting a request for property data to a server;

searching a database for the property data;

generating a data request for the property data not found in the database;

transferring the data request to a mobile device;

obtaining information requested in the data request;

populating data fields with the information;

validating the information in the data fields; and

updating the database with the information from the data fields.

12. The property data retrieval method of claim 11 further comprising the step of sending a report to complete the request for property data.

13. The property data retrieval method of claim 11 wherein the data request is in the form of an electronic form.

14. The property data retrieval method of claim 13 wherein the data fields are embedded in the electronic form.

15. The property data retrieval method of claim 11 wherein the data fields are validated by the mobile device.

16. The property data retrieval method of claim 11 wherein validating is completed by a human proofer.

17. The property data retrieval method of claim 16 wherein the human proofer may add or edit the data fields.

18. The property data retrieval method of claim 11 wherein the mobile device is a personal data assistant or a tablet PC.

19. A computer-enabled apparatus for gathering property data comprising:

a first storage means for storing property data requests;

a mobile device, connected to the first storage means, for gathering the property data;

a second storage means, connected to the mobile device, for storing property data received from said mobile device; and

a proofing means, connected to the second storage means, for error checking the property data.

20. The apparatus of claim 19 further comprising a third storage means connected to the proofing means for storing the property data.

21. The apparatus of claim 19 further comprising a delivery means, connected to the third storage means, for delivering property data to a requester.

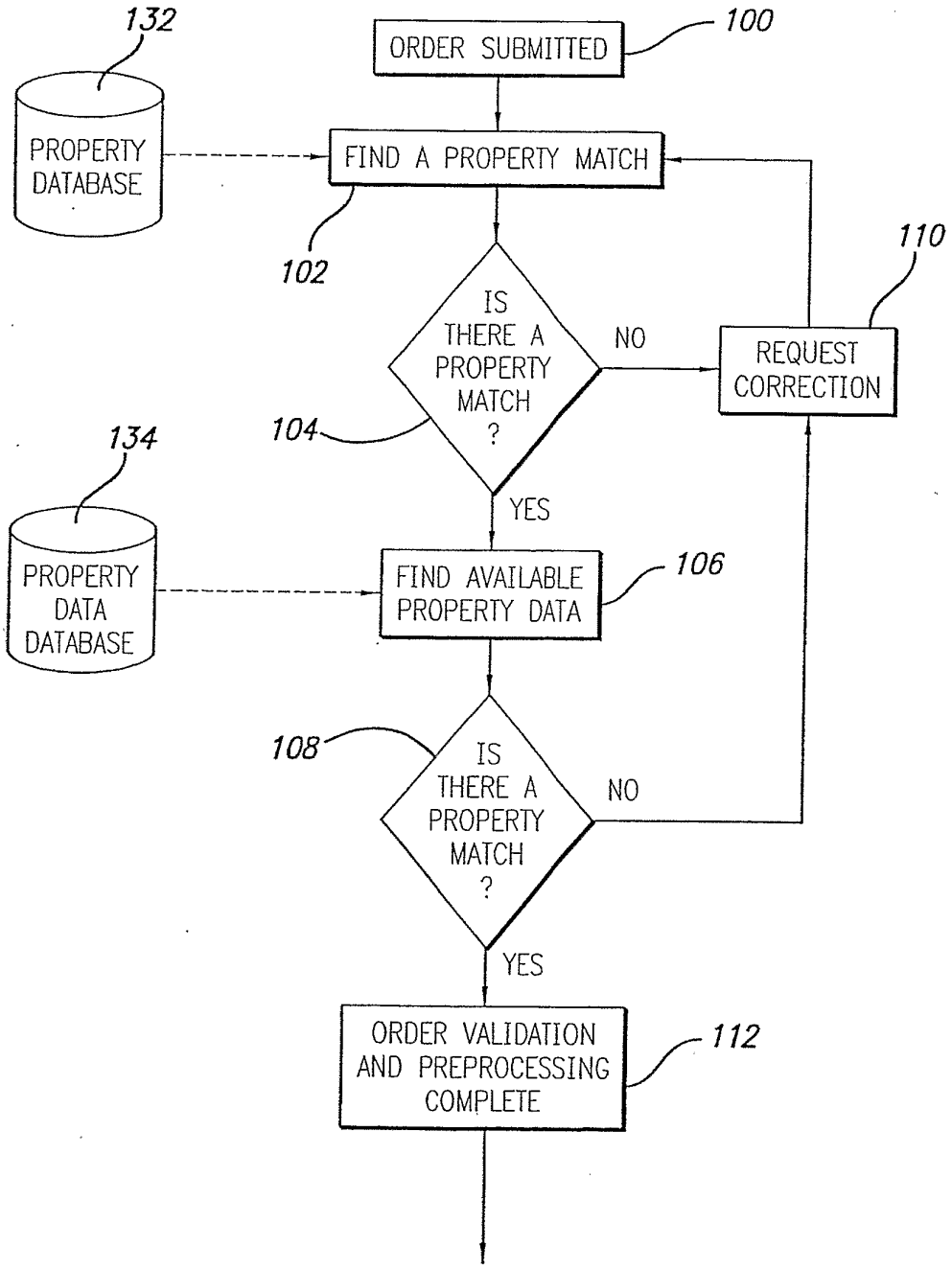
22. The apparatus of claim 19 wherein the mobile device connects to said first and second storage means using a wireless or wired connection.

23. The apparatus of claim 19 wherein said mobile device is a personal digital assistant or a tablet pc.

24. The apparatus of claim 19 further comprising a property database, connected to the first storage means, for checking that the property for which the property data request was generated may be located.

25. The apparatus of claim 19 further comprising a property data database, connected to the first storage means, for checking that property data for the property for which the property data request has been made has not already been saved.

FIG. 1A


132
ORDER SUBMITTED
100
PROPERTY DATABASE
FIND A PROPERTY MATCH
102
110
IS THERE A PROPERTY MATCH ?
NO
REQUEST CORRECTION
104
134
YES
PROPERTY DATA DATABASE
FIND AVAILABLE PROPERTY DATA
106
108
IS THERE A PROPERTY MATCH ?
NO
YES
ORDER VALIDATION AND PREPROCESSING COMPLETE
112

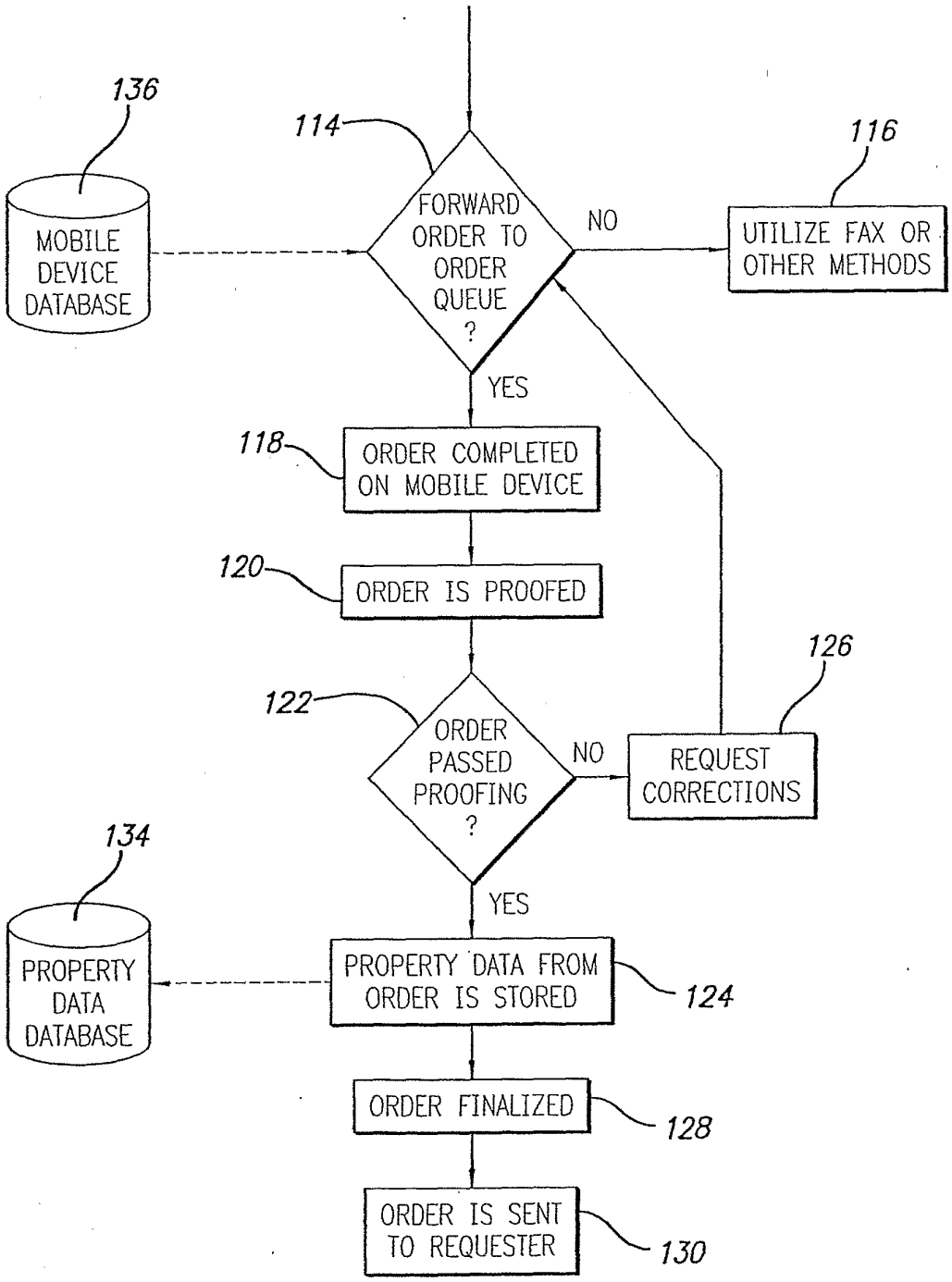

136
MOBILE DEVICE DATABASE
114
FORWARD ORDER TO ORDER QUEUE ?
NO
116
UTILIZE FAX OR OTHER METHODS
YES
118
ORDER COMPLETED ON MOBILE DEVICE
120
ORDER IS PROOFED
126
122
ORDER PASSED PROOFING ?
NO
REQUEST CORRECTIONS
134
YES
PROPERTY DATA DATABASE
PROPERTY DATA FROM ORDER IS STORED
124
ORDER FINALIZED
128
ORDER IS SENT TO REQUESTER
130

FIG. 1B

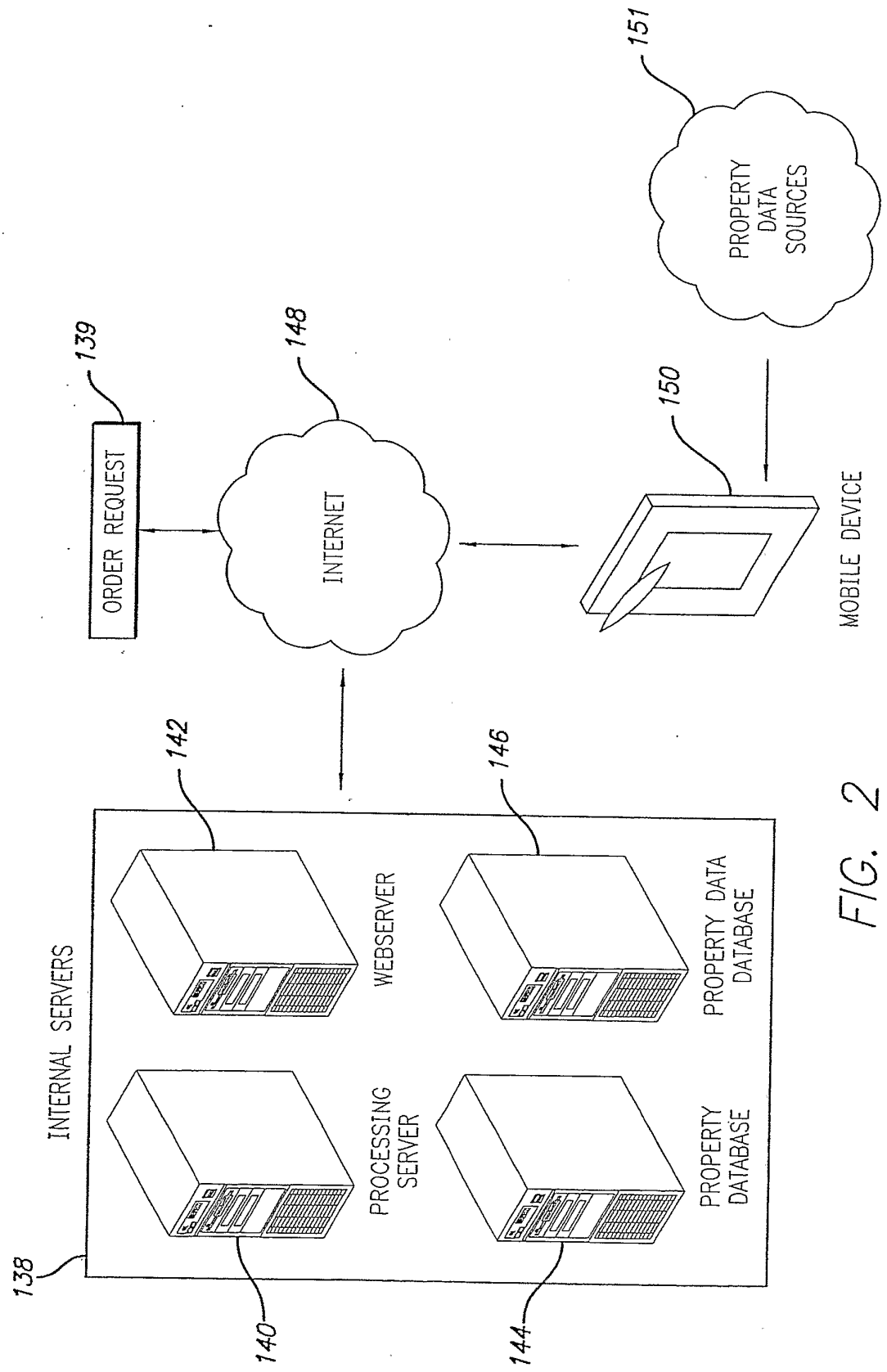

151
PROPERTY DATA SOURCES
139
ORDER REQUEST
148
INTERNET
150
MOBILE DEVICE
142
146
INTERNAL SERVERS
WEBSERVER
PROPERTY DATA DATABASE
PROCESSING SERVER
PROPERTY DATABASE
138
140
144

FIG. 2

FIG. 3

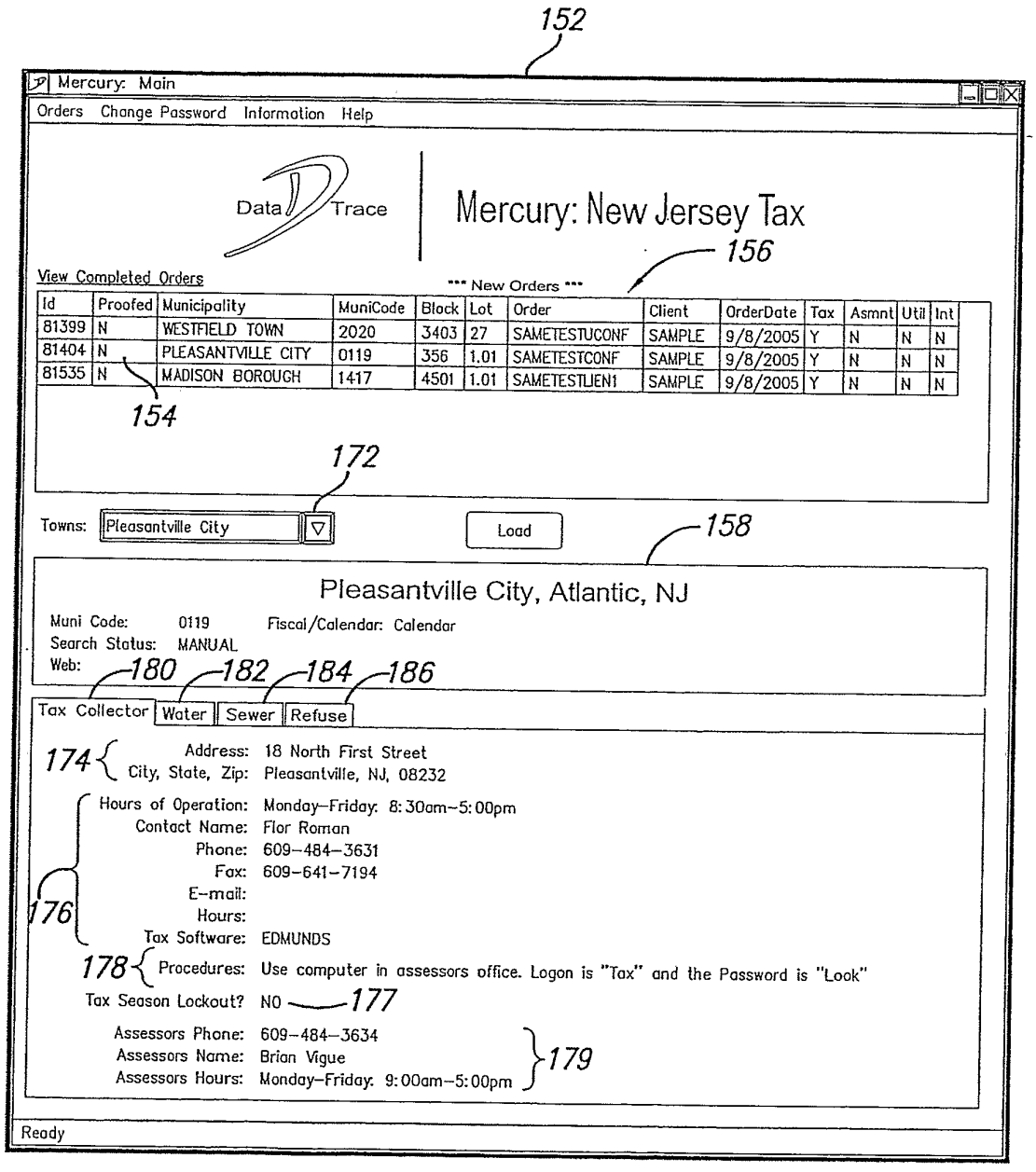

152
Mercury: Main
Orders Change Password Information Help
Data Trace
Mercury: New Jersey Tax
156
View Completed Orders
*** New Orders ***
Id | Proofed | Municipality | MuniCode | Block | Lot | Order | Client | OrderDate | Tax | Asmnt | Util | Int
81399 | N | WESTFIELD TOWN | 2020 | 3403 | 27 | SAMETESTUCONF | SAMPLE | 9/8/2005 | Y | N | N | N
81404 | N | PLEASANTVILLE CITY | 0119 | 356 | 1.01 | SAMETESTCONF | SAMPLE | 9/8/2005 | Y | N | N | N
81535 | N | MADISON BOROUGH | 1417 | 4501 | 1.01 | SAMETESTLIEN1 | SAMPLE | 9/8/2005 | Y | N | N | N
154
172
Towns: Pleasantville City
Load
158
Pleasantville City, Atlantic, NJ
Muni Code: 0119 Fiscal/Calendar: Calendar
Search Status: MANUAL
Web:
180 182 184 186
Tax Collector Water Sewer Refuse
174
Address: 18 North First Street
City, State, Zip: Pleasantville, NJ, 08232
176
Hours of Operation: Monday–Friday: 8:30am–5:00pm
Contact Name: Flor Roman
Phone: 609–484–3631
Fax: 609–641–7194
E-mail:
Hours:
Tax Software: EDMUNDS
178
Procedures: Use computer in assessors office. Logon is "Tax" and the Password is "Look"
Tax Season Lockout? NO 177
Assessors Phone: 609–484–3634
Assessors Name: Brian Vigue
Assessors Hours: Monday–Friday: 9:00am–5:00pm
179
Ready

FIG. 4a

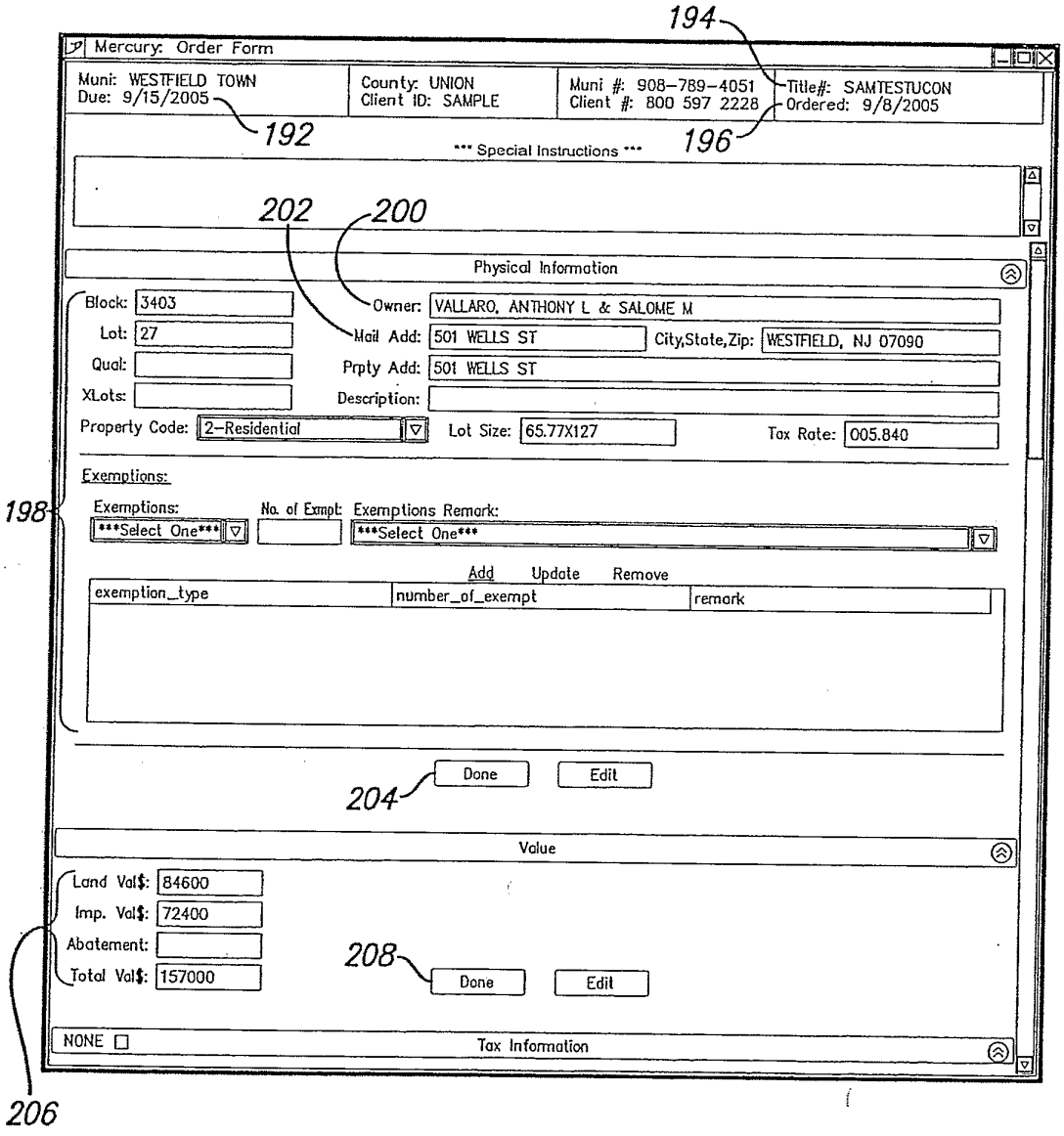

194
Mercury: Order Form
Muni: WESTFIELD TOWN
Due: 9/15/2005
County: UNION
Client ID: SAMPLE
Muni #: 908-789-4051
Client #: 800 597 2228
Title#: SAMTESTUCON
Ordered: 9/8/2005
192
196
*** Special Instructions ***
202
200
Physical Information
Block: 3403
Lot: 27
Qual:
XLots:
Owner: VALLARO, ANTHONY L & SALOME M
Mail Add: 501 WELLS ST
City,State,Zip: WESTFIELD, NJ 07090
Prpty Add: 501 WELLS ST
Description:
Property Code: 2-Residential
Lot Size: 65.77X127
Tax Rate: 005.840
Exemptions:
198
Exemptions:
Select One
No. of Exmpt:
Exemptions Remark:
Select One
Add Update Remove
exemption_type
number_of_exempt
remark
Done
Edit
204
Value
Land Val$: 84600
Imp. Val$: 72400
Abatement:
Total Val$: 157000
208
Done
Edit
NONE
Tax Information
206

FIG. 4b

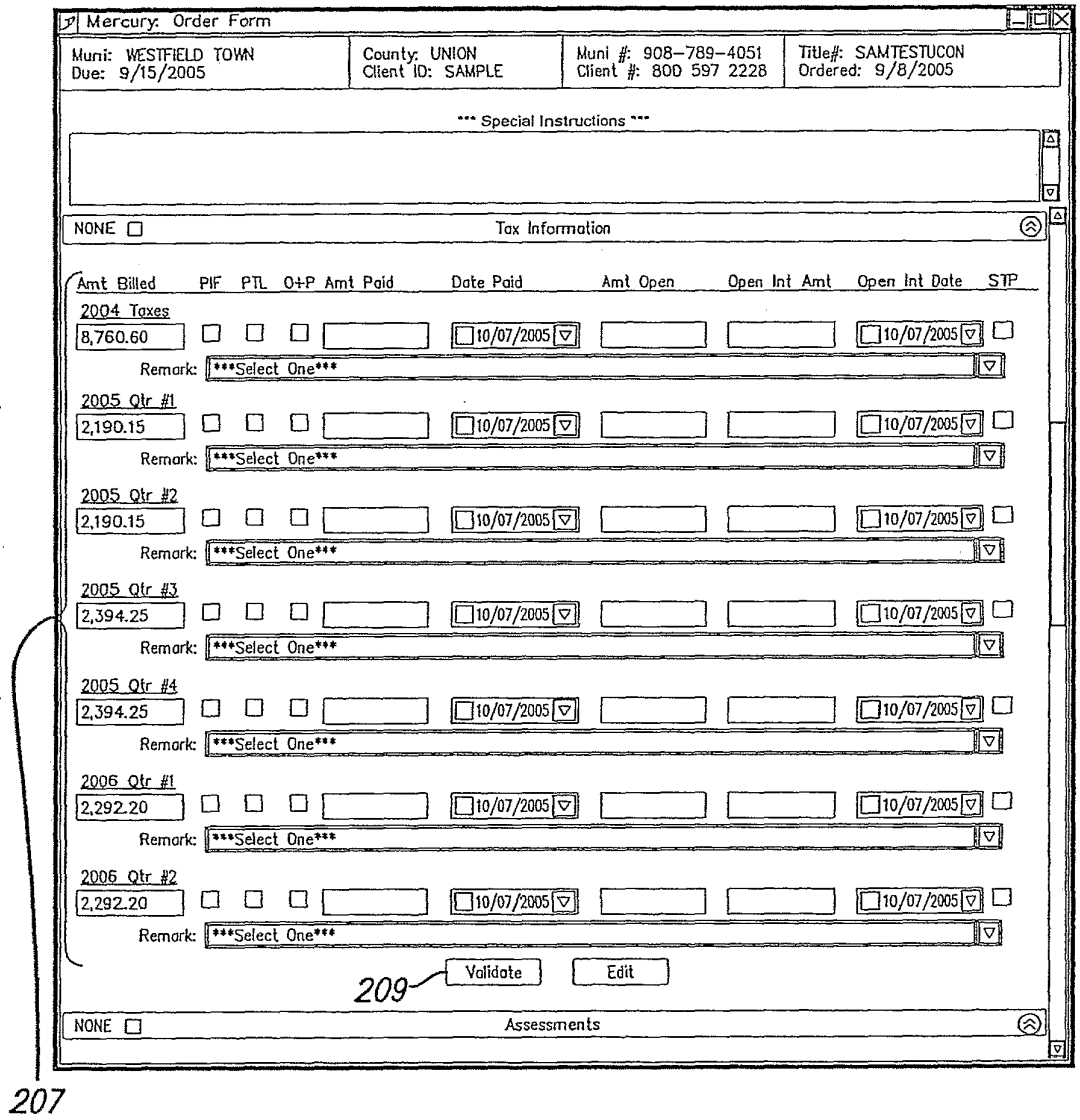

Mercury: Order Form
Muni: WESTFIELD TOWN
Due: 9/15/2005
County: UNION
Client ID: SAMPLE
Muni #: 908-789-4051
Client #: 800 597 2228
Title#: SAMTESTUCON
Ordered: 9/8/2005
*** Special Instructions ***
NONE
Tax Information
Amt Billed
PIF
PTL
O+P
Amt Paid
Date Paid
Amt Open
Open Int Amt
Open Int Date
STP
2004 Taxes
8,760.60
2005 Qtr #1
2,190.15
2005 Qtr #2
2,190.15
2005 Qtr #3
2,394.25
2005 Qtr #4
2,394.25
2006 Qtr #1
2,292.20
2006 Qtr #2
2,292.20
Remark:
Select One
10/07/2005
209
Validate
Edit
NONE
Assessments
207

FIG. 4c

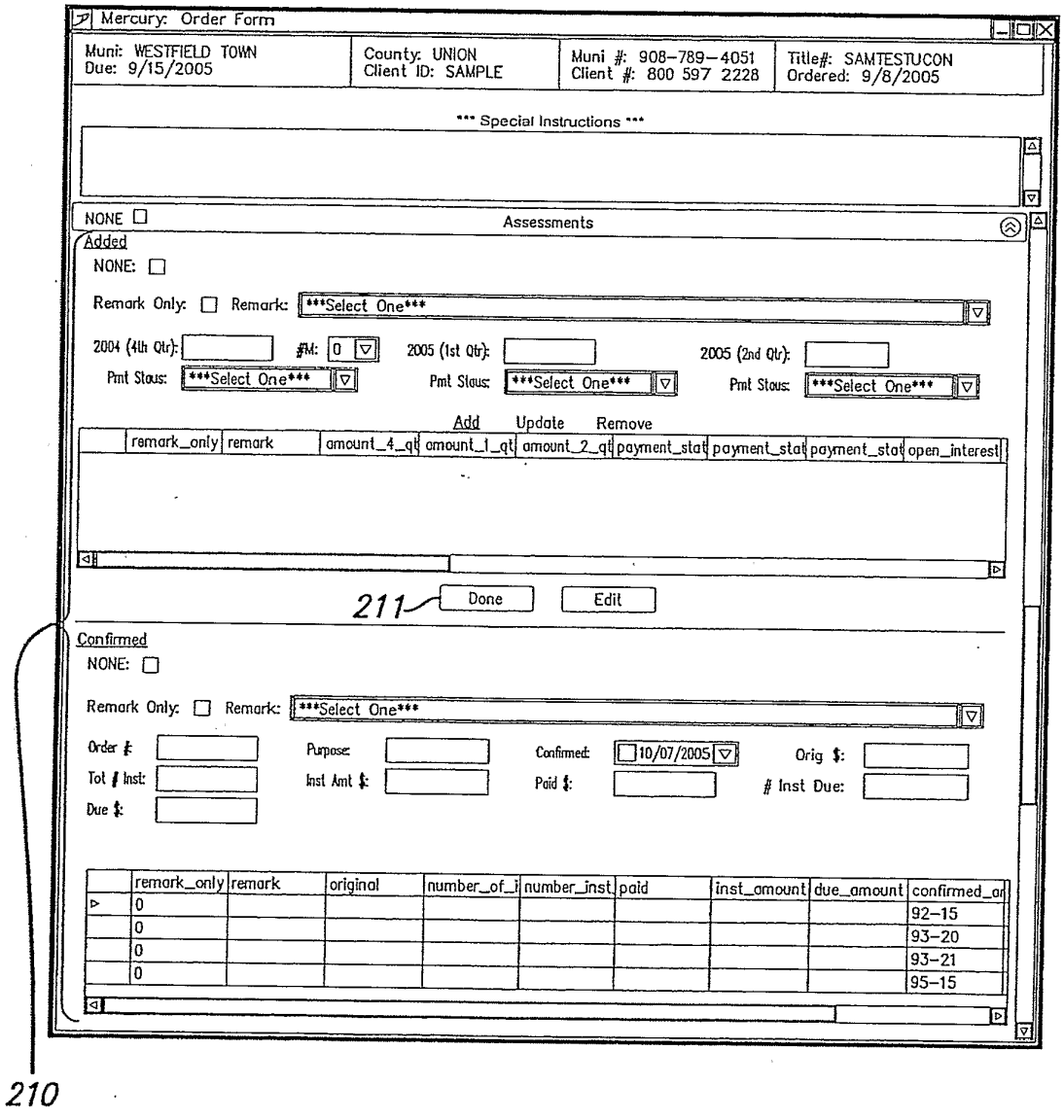

Mercury: Order Form
Muni: WESTFIELD TOWN
Due: 9/15/2005
County: UNION
Client ID: SAMPLE
Muni #: 908-789-4051
Client #: 800 597 2228
Title#: SAMTESTUCON
Ordered: 9/8/2005
*** Special Instructions ***
NONE
Assessments
Added
NONE:
Remark Only:
Remark:
Select One
2004 (4th Qtr):
#M:
2005 (1st Qtr):
2005 (2nd Qtr):
Pmt Stous:
Add
Update
Remove
remark_only
remark
amount_4_qt
amount_1_qt
amount_2_qt
payment_stat
payment_stat
payment_stat
open_interest
211
Done
Edit
Confirmed
NONE:
Remark Only:
Remark:
Select One
Order #:
Purpose:
Confirmed:
10/07/2005
Orig $:
Tot # Inst:
Inst Amt $:
Paid $:
Inst Due:
Due $:
remark_only
remark
original
number_of_i
number_inst
paid
inst_amount
due_amount
confirmed_ar
0
92-15
93-20
93-21
95-15
210

FIG. 4d

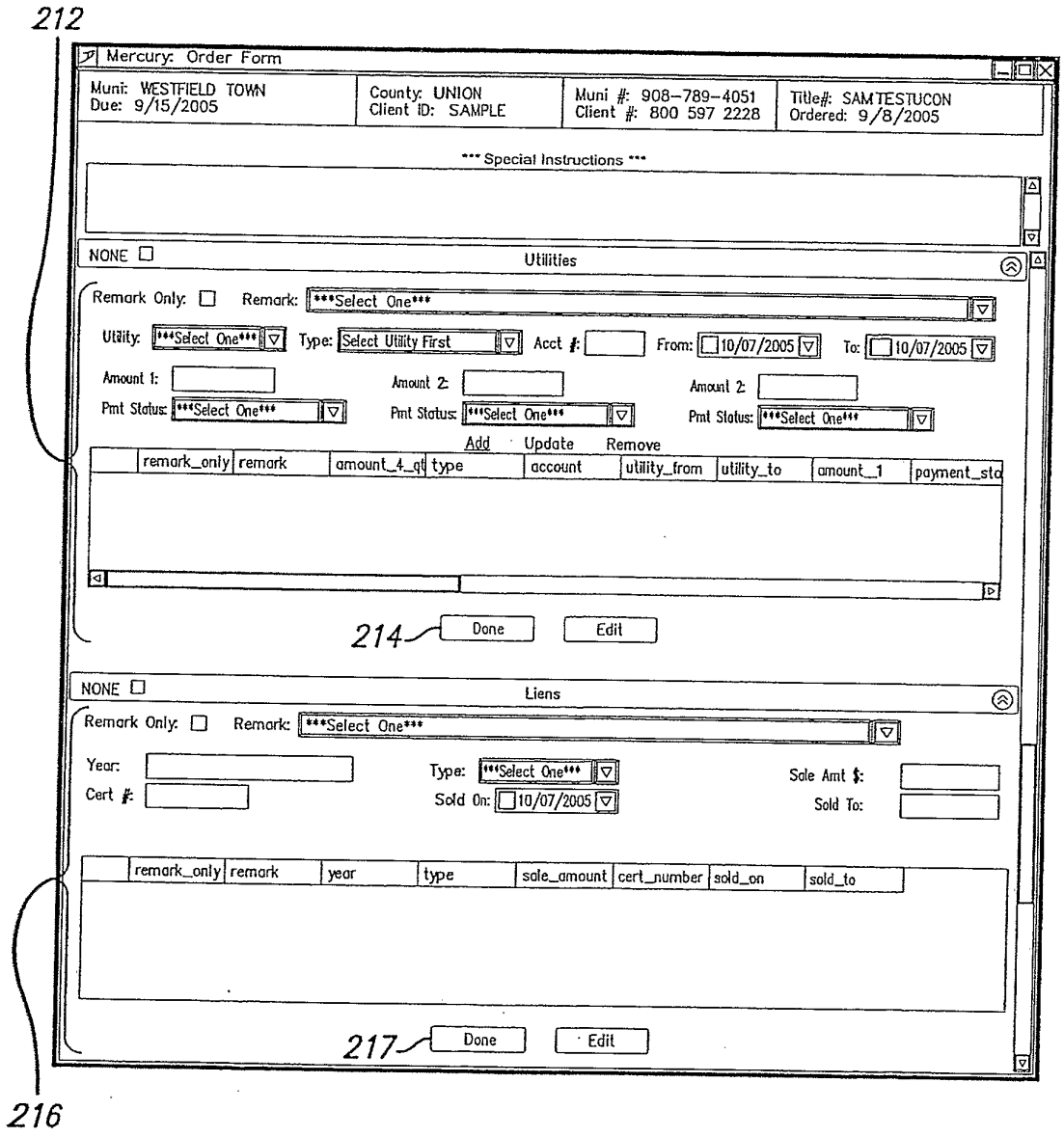

212
Mercury: Order Form
Muni: WESTFIELD TOWN
Due: 9/15/2005
County: UNION
Client ID: SAMPLE
Muni #: 908-789-4051
Client #: 800 597 2228
Title#: SAMTESTUCON
Ordered: 9/8/2005
*** Special Instructions ***
NONE
Utilities
Remark Only:
Remark:
Select One
Utility:
Type:
Select Utility First
Acct #:
From:
10/07/2005
To:
Amount 1:
Amount 2:
Amount 2:
Pmt Status:
Add
Update
Remove
remark_only
remark
amount_4_qt
type
account
utility_from
utility_to
amount_1
payment_sta
214
Done
Edit
NONE
Liens
Year:
Type:
Sale Amt $:
Cert #:
Sold On:
Sold To:
remark_only
remark
year
type
sale_amount
cert_number
sold_on
sold_to
217
Done
Edit
216

FIG. 4e

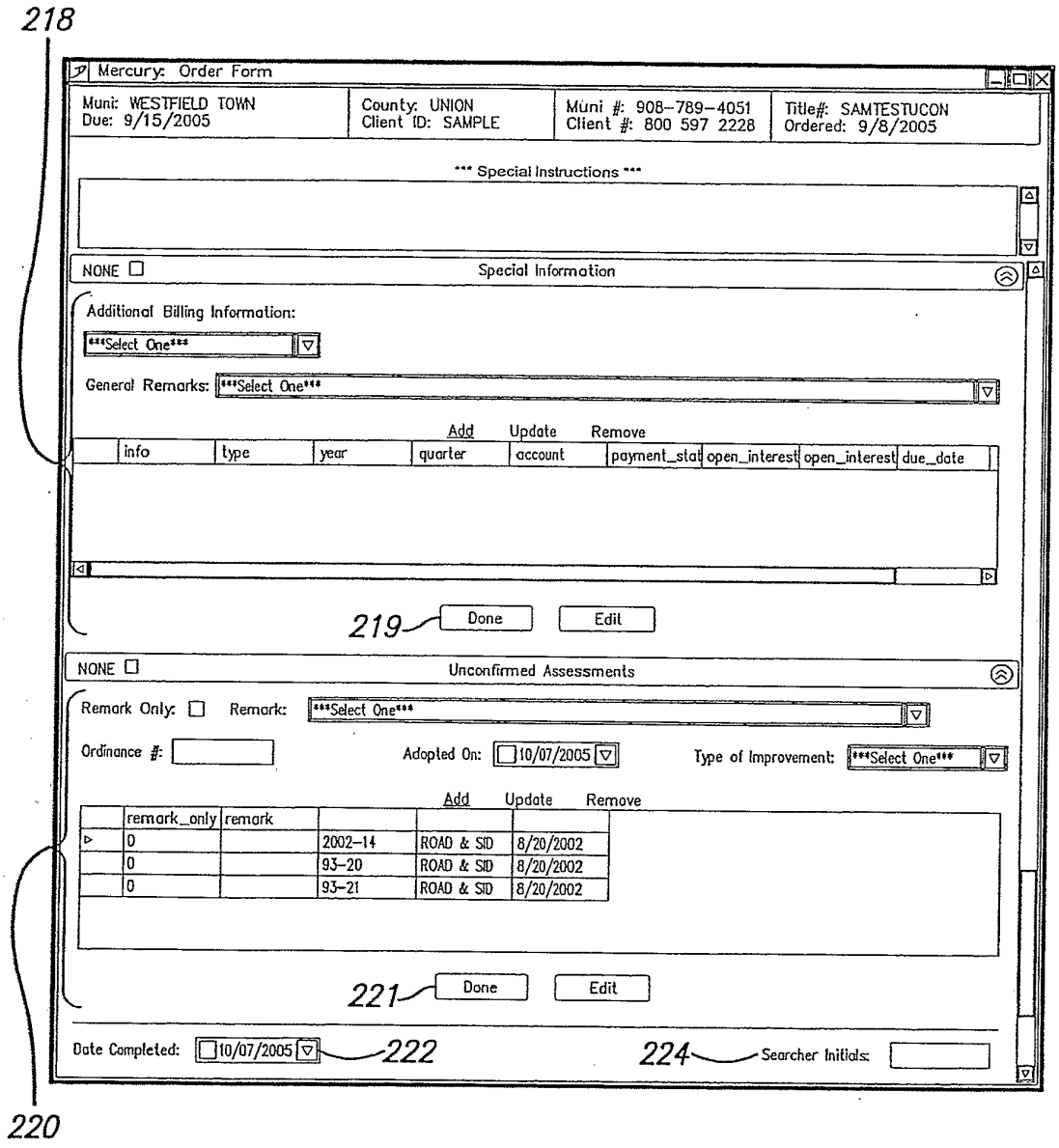

218
Mercury: Order Form
Muni: WESTFIELD TOWN
Due: 9/15/2005
County: UNION
Client ID: SAMPLE
Muni #: 908-789-4051
Client #: 800 597 2228
Title#: SAMTESTUCON
Ordered: 9/8/2005
*** Special Instructions ***
NONE
Special Information
Additional Billing Information:
Select One
General Remarks: ***Select One***
Add Update Remove
info type year quarter account payment_stat open_interest open_interest due_date
219
Done
Edit
NONE
Unconfirmed Assessments
Remark Only:
Remark: ***Select One***
Ordinance #:
Adopted On: 10/07/2005
Type of Improvement: ***Select One***
Add Update Remove
remark_only remark
0 2002-14 ROAD & SID 8/20/2002
0 93-20 ROAD & SID 8/20/2002
0 93-21 ROAD & SID 8/20/2002
221
Done
Edit
Date Completed: 10/07/2005
222
224
Searcher Initials:
220

FIG. 4f

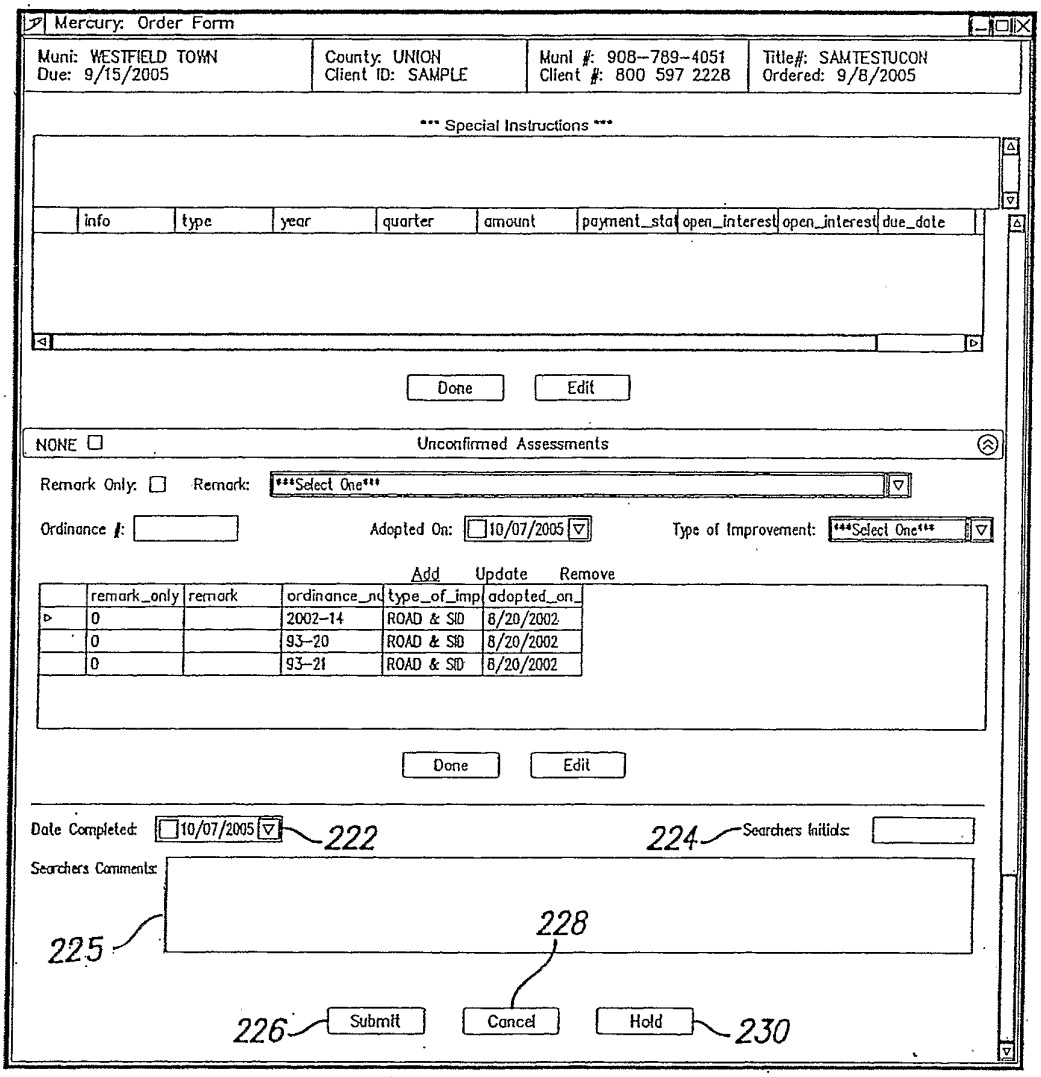
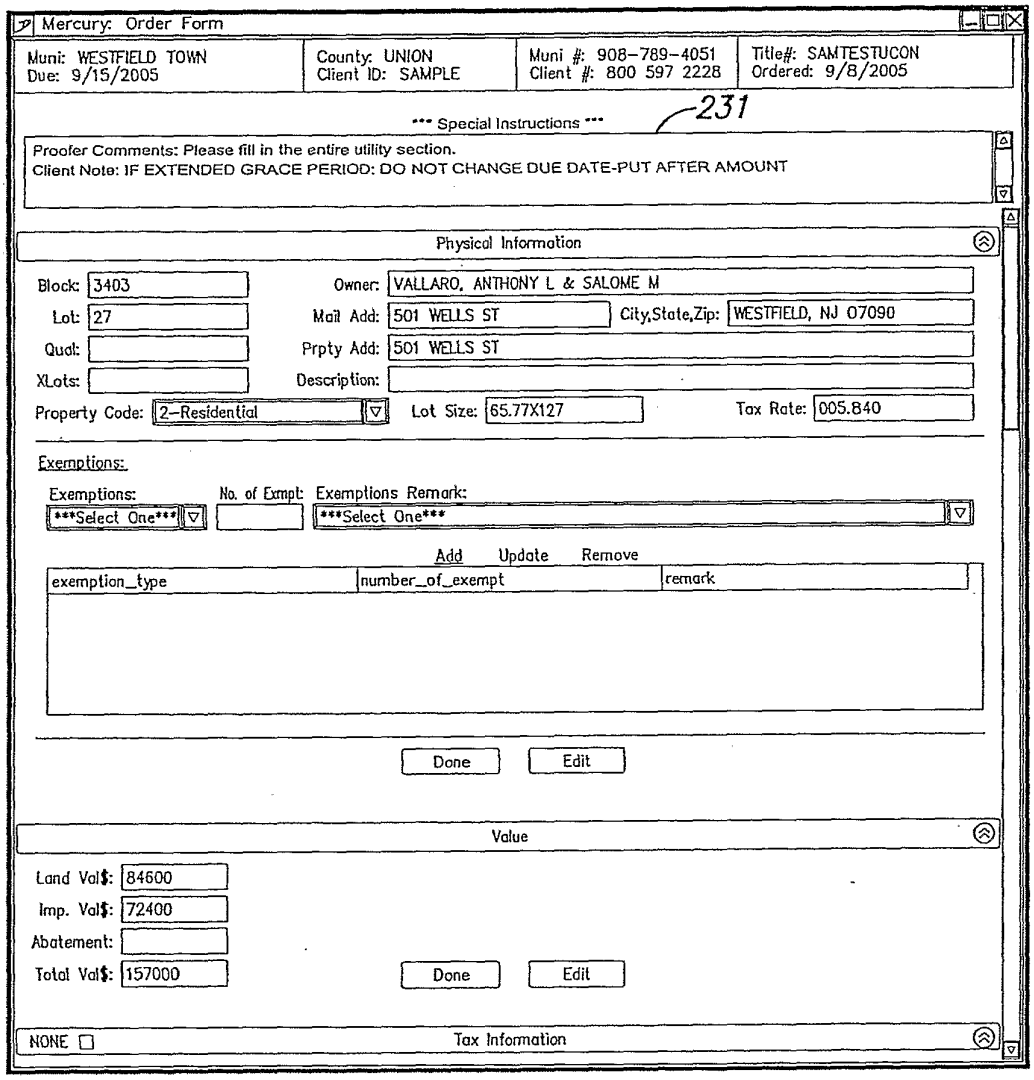

Mercury: Order Form
Muni: WESTFIELD TOWN
Due: 9/15/2005
County: UNION
Client ID: SAMPLE
Muni #: 908-789-4051
Client #: 800 597 2228
Title#: SAMTESTUCON
Ordered: 9/8/2005
*** Special Instructions ***
info
type
year
quarter
amount
payment_sta
open_interest
open_interest
due_date
Done
Edit
NONE
Unconfirmed Assessments
Remark Only:
Remark:
Select One
Ordinance #:
Adopted On:
10/07/2005
Type of Improvement:
Select One
Add
Update
Remove
remark_only
remark
ordinance_n
type_of_imp
adopted_on_
0
2002-14
ROAD & SID
8/20/2002
0
93-20
ROAD & SID
8/20/2002
0
93-21
ROAD & SID
8/20/2002
Done
Edit
Date Completed:
10/07/2005
222
224
Searchers Initials:
Searchers Comments:
225
228
226
Submit
Cancel
Hold
230

FIG. 5


Mercury: Order Form
Muni: WESTFIELD TOWN
Due: 9/15/2005
County: UNION
Client ID: SAMPLE
Muni #: 908-789-4051
Client #: 800 597 2228
Title#: SAMTESTUCON
Ordered: 9/8/2005
*** Special Instructions ***
231
Proofer Comments: Please fill in the entire utility section.
Client Note: IF EXTENDED GRACE PERIOD: DO NOT CHANGE DUE DATE-PUT AFTER AMOUNT
Physical Information
Block: 3403
Lot: 27
Qual:
XLots:
Property Code: 2-Residential
Owner: VALLARO, ANTHONY L & SALOME M
Mail Add: 501 WELLS ST
City,State,Zip: WESTFIELD, NJ 07090
Prpty Add: 501 WELLS ST
Description:
Lot Size: 65.77X127
Tax Rate: 005.840
Exemptions:
Exemptions:
Select One
No. of Exmpt:
Exemptions Remark:
Select One
Add Update Remove
exemption_type
number_of_exempt
remark
Done
Edit
Value
Land Val$: 84600
Imp. Val$: 72400
Abatement:
Total Val$: 157000
Done
Edit
NONE
Tax Information

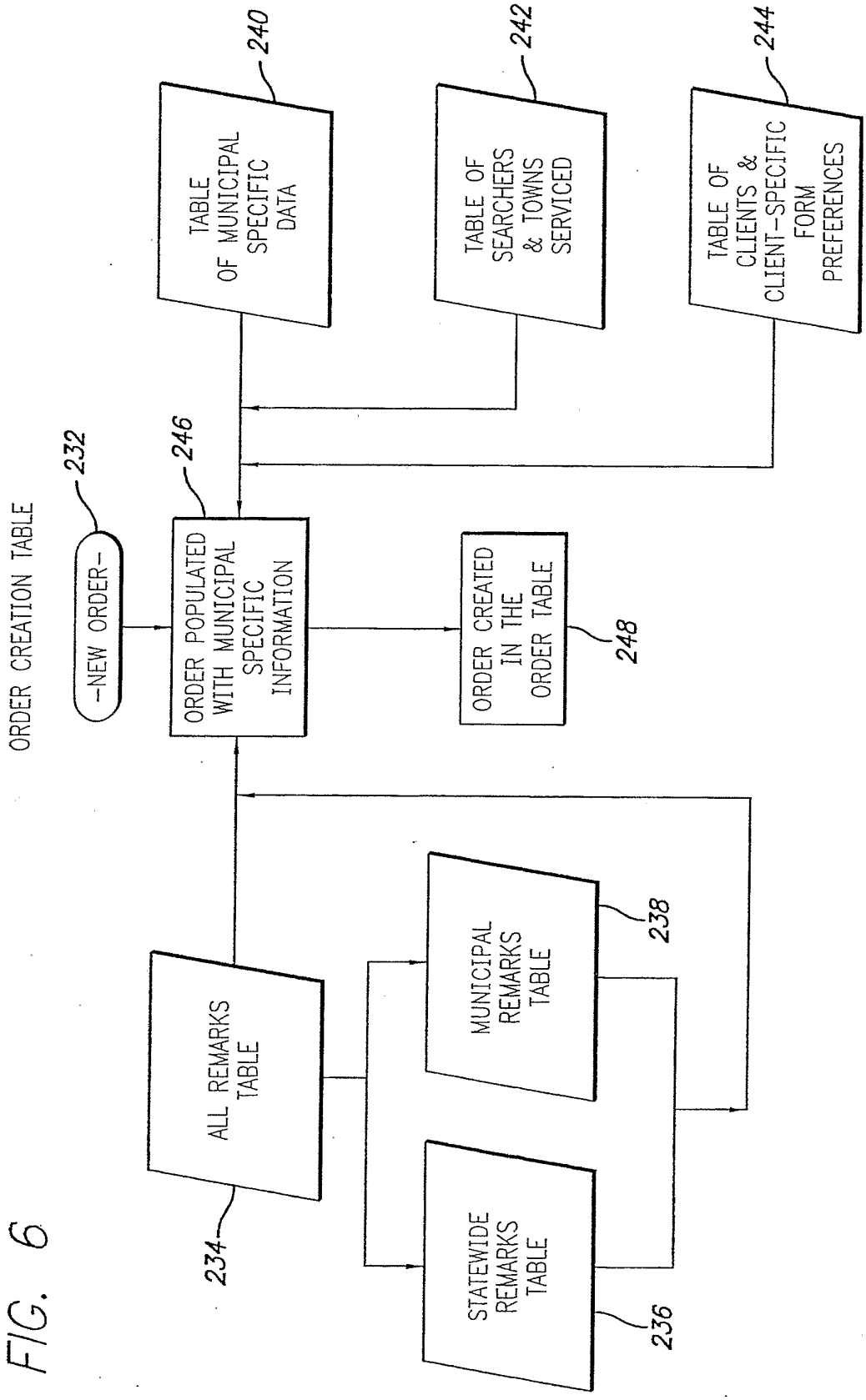
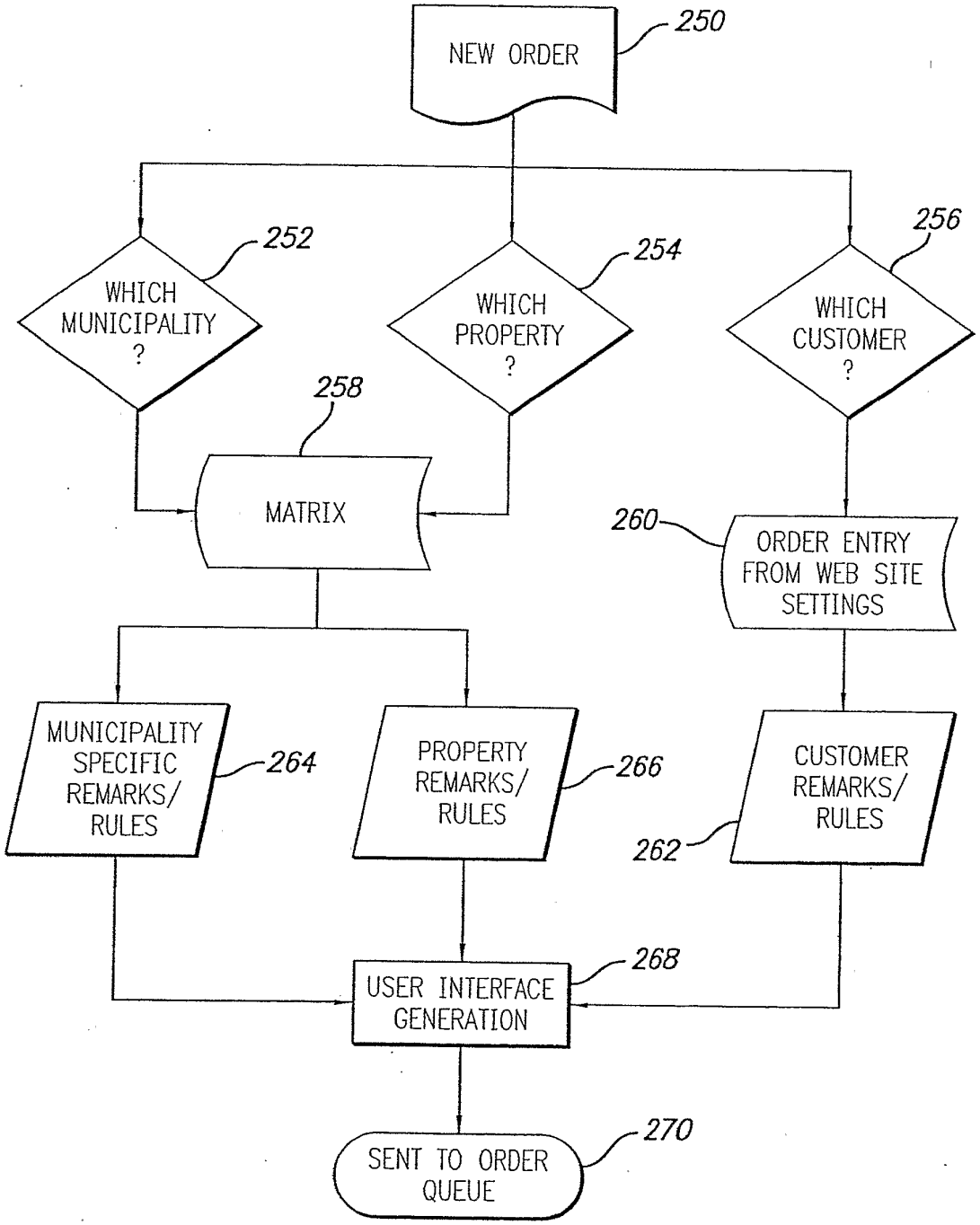

ORDER CREATION TABLE
-NEW ORDER-
232
ORDER POPULATED WITH MUNICIPAL SPECIFIC INFORMATION
246
ORDER CREATED IN THE ORDER TABLE
248
TABLE OF MUNICIPAL SPECIFIC DATA
240
TABLE OF SEARCHERS & TOWNS SERVICED
242
TABLE OF CLIENTS & CLIENT-SPECIFIC FORM PREFERENCES
244
ALL REMARKS TABLE
234
MUNICIPAL REMARKS TABLE
238
STATEWIDE REMARKS TABLE
236

FIG. 6

FIG. 7

DYNAMIC GENERATION OF USER INTERFACE



14/26

FIG. 8

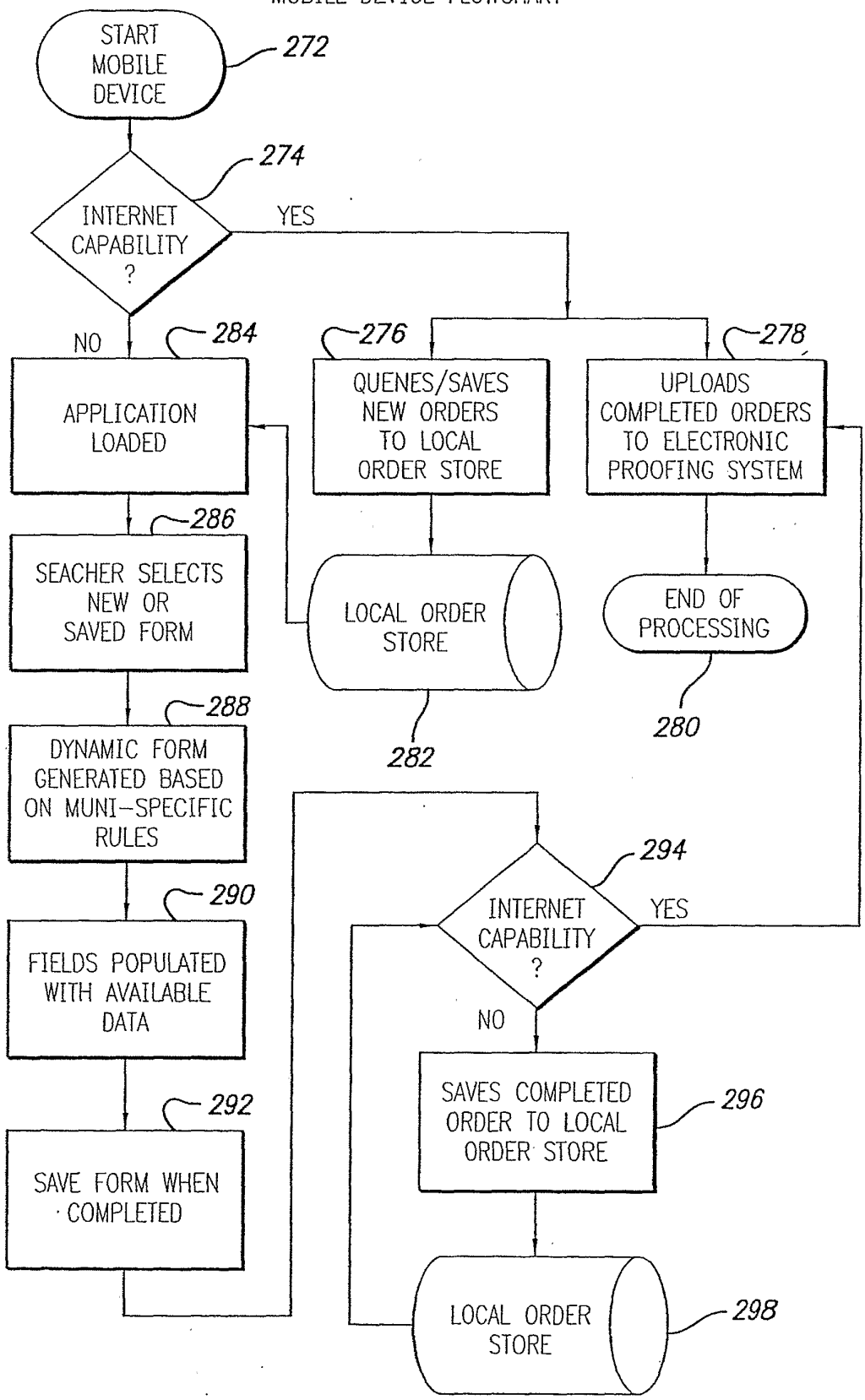

MOBILE DEVICE FLOWCHART
START MOBILE DEVICE
272
INTERNET CAPABILITY ?
274
YES
NO
284
APPLICATION LOADED
276
QUENES/SAVES NEW ORDERS TO LOCAL ORDER STORE
278
UPLOADS COMPLETED ORDERS TO ELECTRONIC PROOFING SYSTEM
286
SEACHER SELECTS NEW OR SAVED FORM
LOCAL ORDER STORE
282
END OF PROCESSING
280
288
DYNAMIC FORM GENERATED BASED ON MUNI-SPECIFIC RULES
290
FIELDS POPULATED WITH AVAILABLE DATA
292
SAVE FORM WHEN COMPLETED
294
INTERNET CAPABILITY ?
YES
NO
SAVES COMPLETED ORDER TO LOCAL ORDER STORE
296
LOCAL ORDER STORE
298

FIG. 9

EXAMPLE MATRIX FIELD

FIELD #2:	TAX AUTOMATION TYPE
DATA SOURCE ?:	PROPERTY DATA DATABASE
FIELD VAULES:	1. TSU 2. FARETS TAF FILE 3. FARETS TPS FILE 4. OTHER 5. NONE
DO WHAT WITH THE DATA ? :	DETERMINE WHETHER A MUNICIPALITY HAS AUTOMATION. 300
APPLY A RULE TO THE DATA ?:	YES 302
IF " YES," WHAT/HOW ?:	IF AUTOMATION IS AVAILABLE USE IT 304
NOTE:	IN THE FUTURE, THE "FIELD VALUES" MAY EXPAND IN THIS FIELD.

FIG. 10

EXAMPLE MATRIX FIELD

FIELD #14:	BANKRUPTCY (FIELD RESEARCH REQUIRED)
DATA SOURCE ?:	PROPERTY DATA DATABASE
FIELD VAULES:	YES: NO
DO WHAT WITH THE DATA ? :	DETERMINE WHETHER PROPERTY HAS BANKRUPTCY BILLING THAT REQUIRE FIELD RESEARCH 306
APPLY A RULE TO THE DATA ?:	YES 308
IF "YES," WHAT/HOW ?:	IF BANKRUPTCY FLAG IS INDICATED ORDER MUST GO TO THE MOBILE DEVICE FOR MANUAL RESEARCH 310

FIG. 11

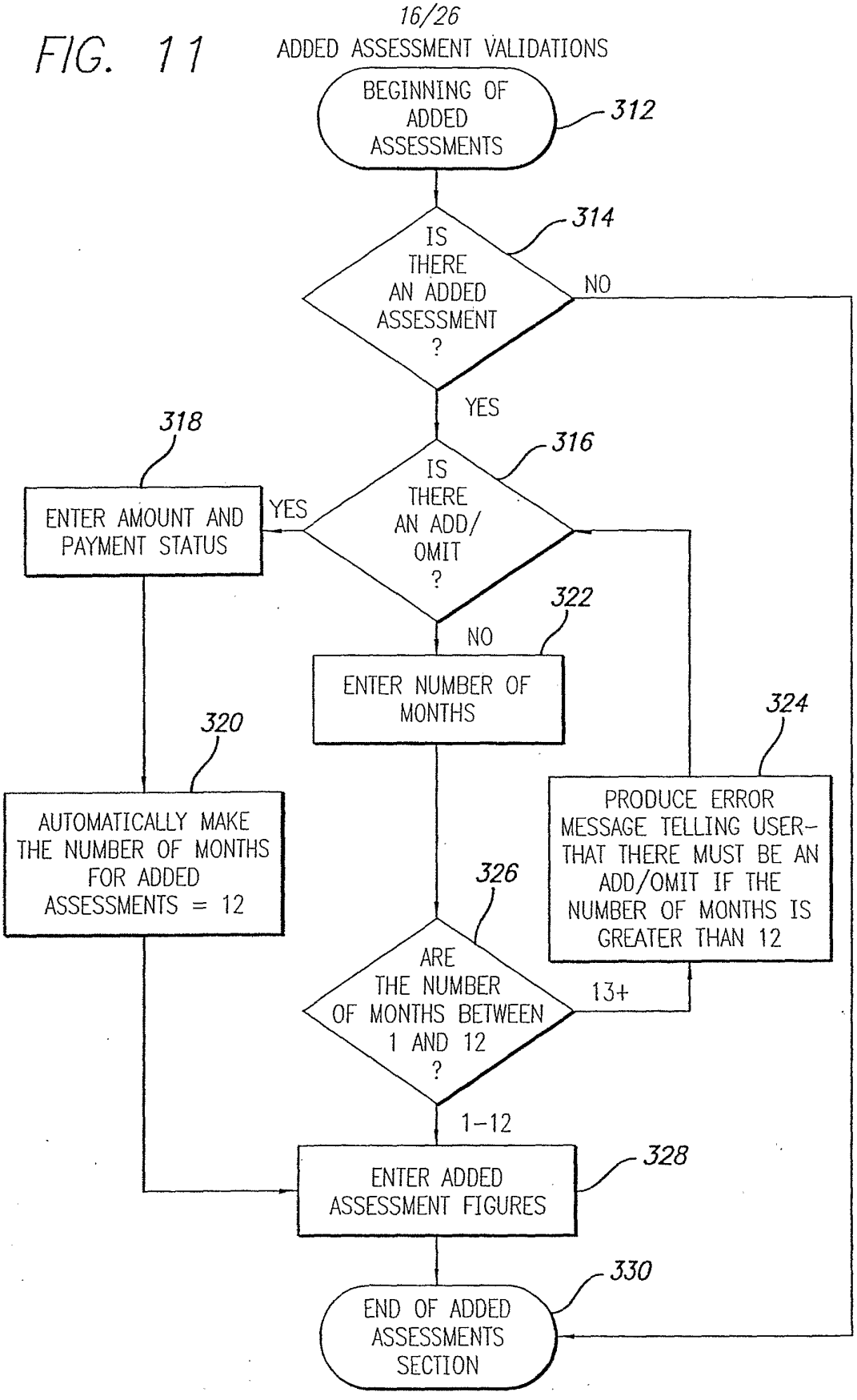
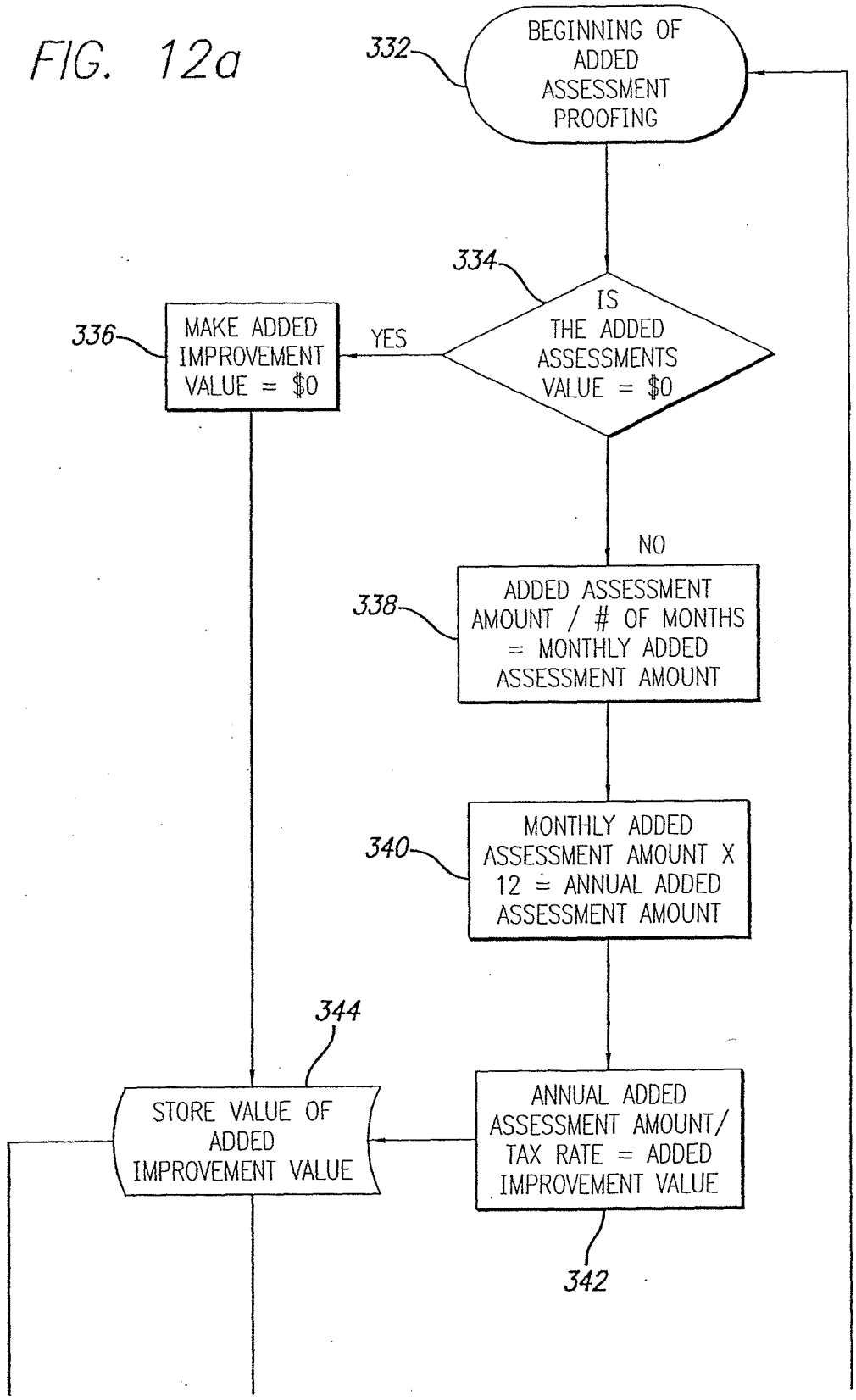

ADDED ASSESSMENT VALIDATIONS
BEGINNING OF ADDED ASSESSMENTS
312
IS THERE AN ADDED ASSESSMENT ?
314
NO
YES
318
316
ENTER AMOUNT AND PAYMENT STATUS
YES
IS THERE AN ADD/ OMIT ?
322
NO
ENTER NUMBER OF MONTHS
320
324
AUTOMATICALLY MAKE THE NUMBER OF MONTHS FOR ADDED ASSESSMENTS = 12
PRODUCE ERROR MESSAGE TELLING USER- THAT THERE MUST BE AN ADD/OMIT IF THE NUMBER OF MONTHS IS GREATER THAN 12
326
ARE THE NUMBER OF MONTHS BETWEEN 1 AND 12 ?
13+
1-12
ENTER ADDED ASSESSMENT FIGURES
328
330
END OF ADDED ASSESSMENTS SECTION

FIG. 12a


ADDED ASSESSMENT PROOFING
332
BEGINNING OF ADDED ASSESSMENT PROOFING
334
IS THE ADDED ASSESSMENTS VALUE = $0
YES
336
MAKE ADDED IMPROVEMENT VALUE = $0
NO
338
ADDED ASSESSMENT AMOUNT / # OF MONTHS = MONTHLY ADDED ASSESSMENT AMOUNT
340
MONTHLY ADDED ASSESSMENT AMOUNT X 12 = ANNUAL ADDED ASSESSMENT AMOUNT
342
ANNUAL ADDED ASSESSMENT AMOUNT/ TAX RATE = ADDED IMPROVEMENT VALUE
344
STORE VALUE OF ADDED IMPROVEMENT VALUE

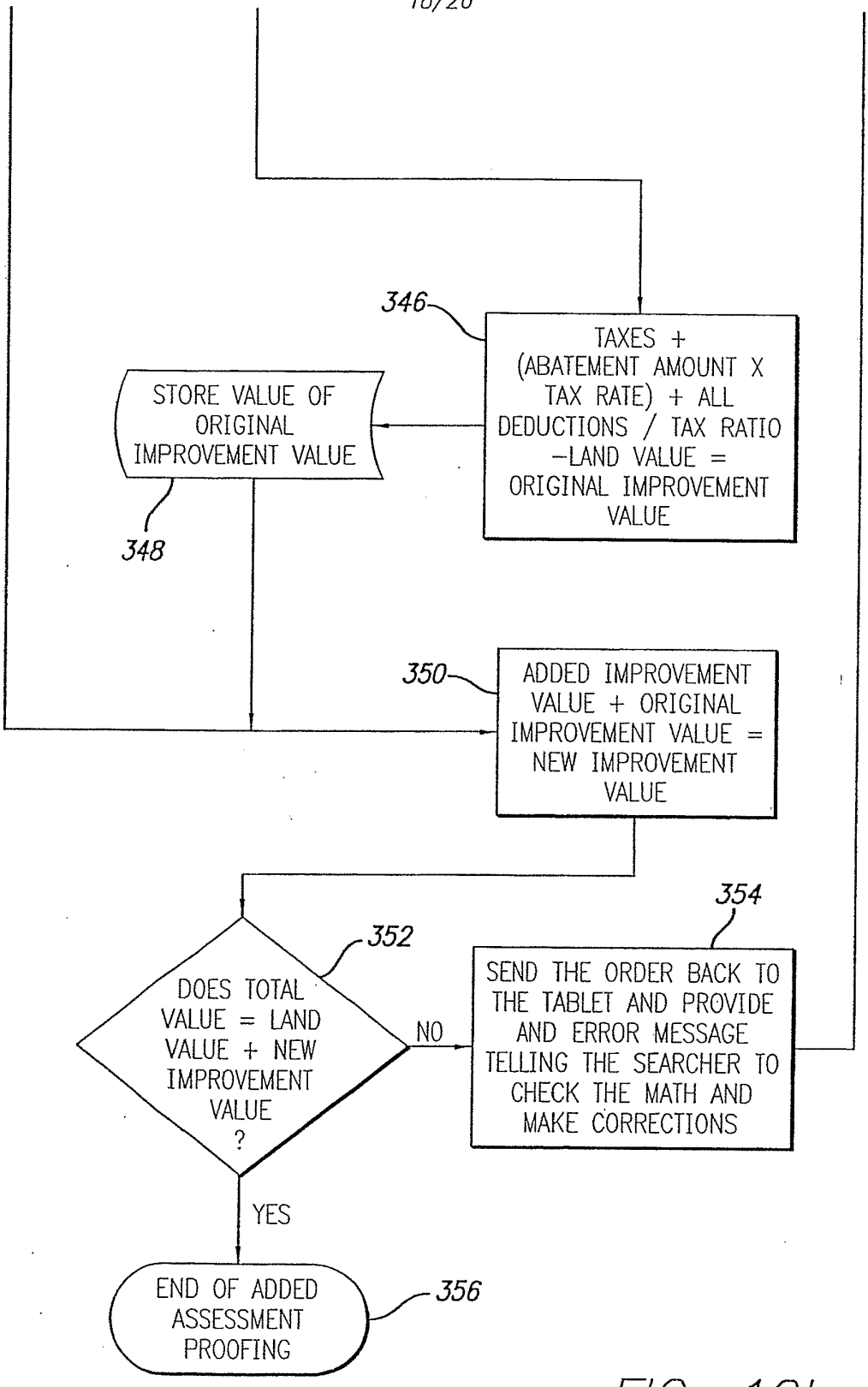
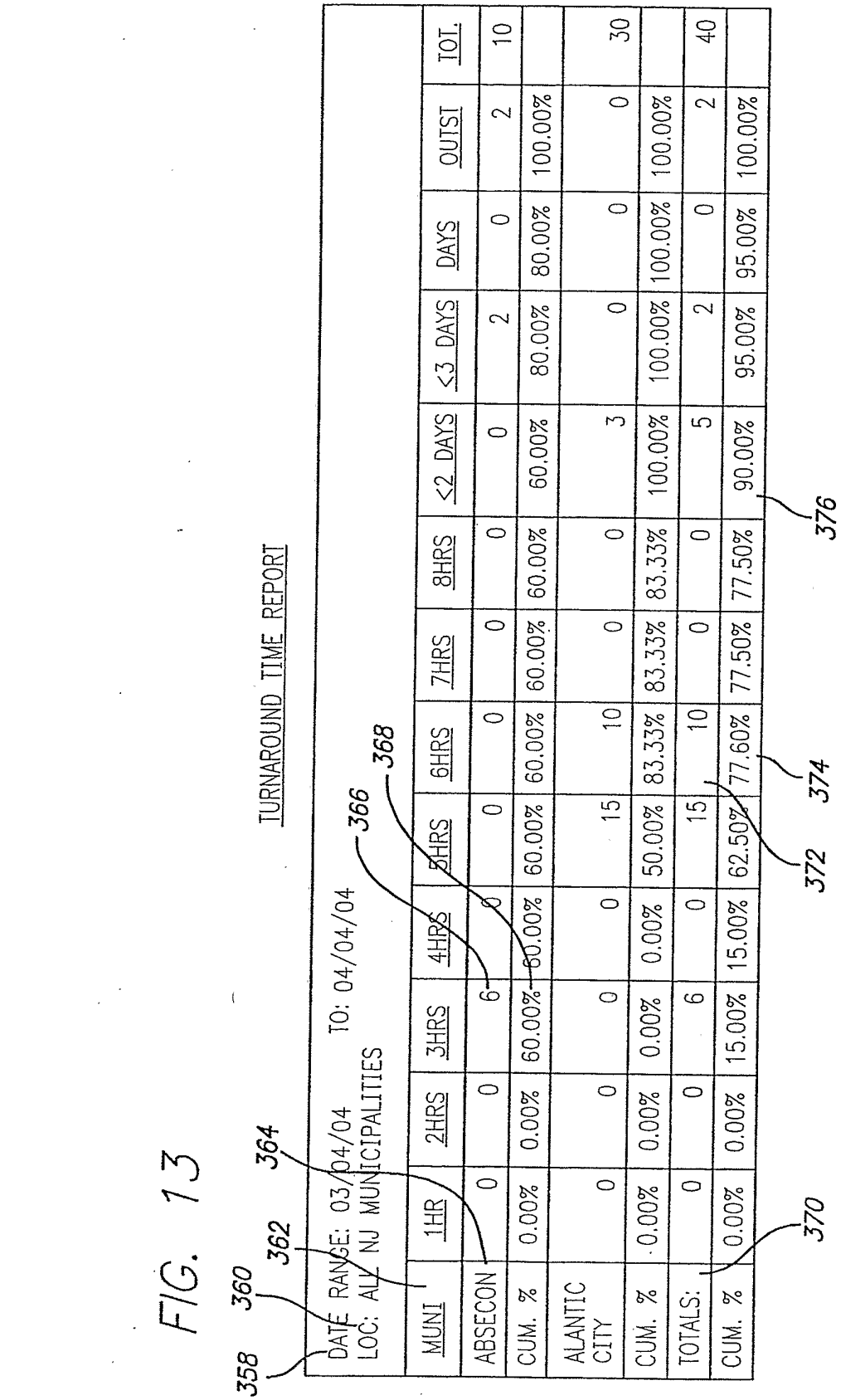

346
TAXES + (ABATEMENT AMOUNT X TAX RATE) + ALL DEDUCTIONS / TAX RATIO −LAND VALUE = ORIGINAL IMPROVEMENT VALUE
STORE VALUE OF ORIGINAL IMPROVEMENT VALUE
348
350
ADDED IMPROVEMENT VALUE + ORIGINAL IMPROVEMENT VALUE = NEW IMPROVEMENT VALUE
352
DOES TOTAL VALUE = LAND VALUE + NEW IMPROVEMENT VALUE ?
NO
354
SEND THE ORDER BACK TO THE TABLET AND PROVIDE AND ERROR MESSAGE TELLING THE SEARCHER TO CHECK THE MATH AND MAKE CORRECTIONS
YES
END OF ADDED ASSESSMENT PROOFING
356

FIG. 12b

FIG. 13



TURNAROUND TIME REPORT

DATE RANGE: 03/04/04 TO: 04/04/04
LOC: ALL NJ MUNICIPALITIES

MUNI	1HR	2HRS	3HRS	4HRS	5HRS	6HRS	7HRS	8HRS	<2 DAYS	<3 DAYS	DAYS	OUTST	TOT.
ABSECON	0	0	6	0	0	0	0	0	0	2	0	2	10
CUM. %	0.00%	0.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	80.00%	80.00%	100.00%	
ALANTIC CITY	0	0	0	0	15	10	0	0	3	0	0	0	30
CUM. %	0.00%	0.00%	0.00%	0.00%	50.00%	83.33%	83.33%	83.33%	100.00%	100.00%	100.00%	100.00%	
TOTALS:	0	0	6	0	15	10	0	0	5	2	0	2	40
CUM. %	0.00%	0.00%	15.00%	15.00%	62.50%	77.60%	77.50%	77.50%	90.00%	95.00%	95.00%	100.00%	

FIG. 14

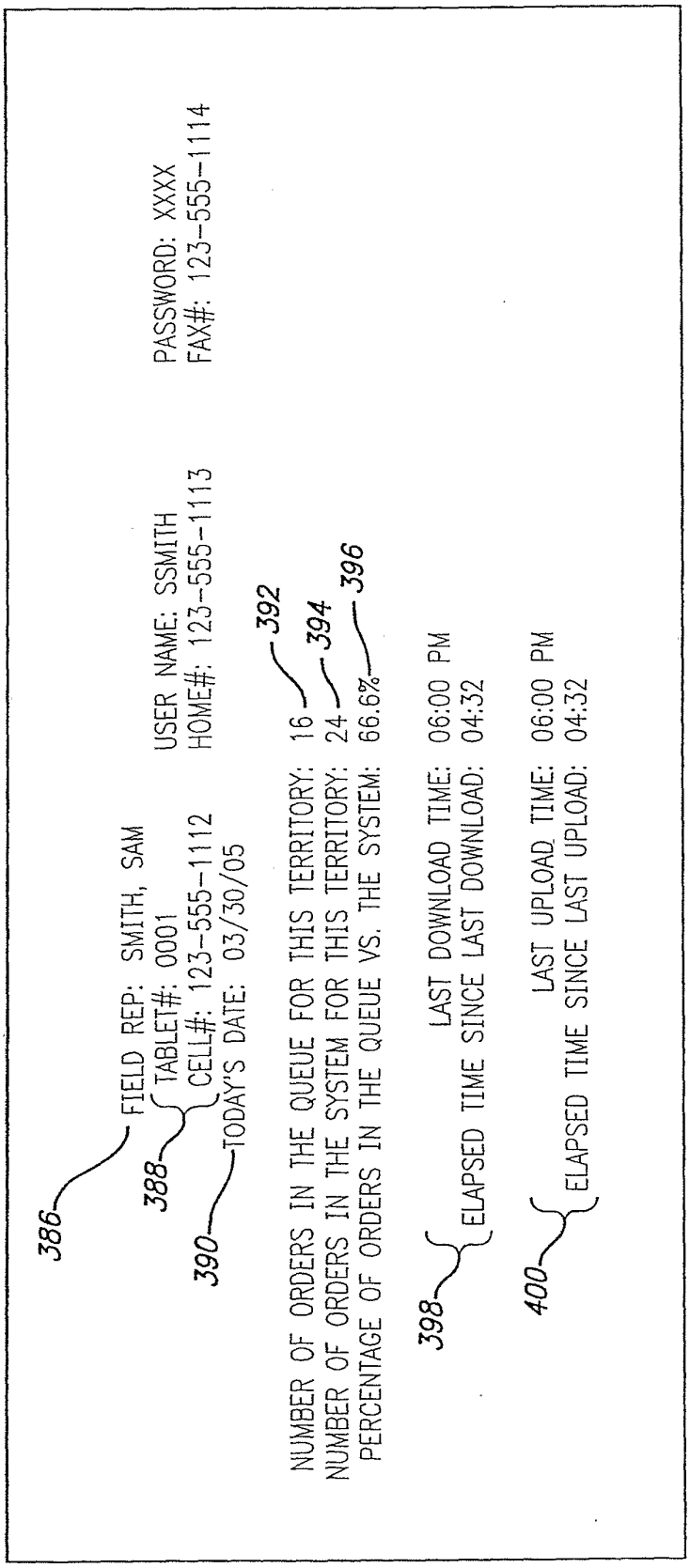

TABLET ORDER TRACKING – SUMMARY REPORT
386
FIELD REP: SMITH, SAM
388
TABLET#: 0001
CELL#: 123-555-1112
390
TODAY'S DATE: 03/30/05
USER NAME: SSMITH
HOME#: 123-555-1113
PASSWORD: XXXX
FAX#: 123-555-1114
NUMBER OF ORDERS IN THE QUEUE FOR THIS TERRITORY: 16
392
NUMBER OF ORDERS IN THE SYSTEM FOR THIS TERRITORY: 24
394
PERCENTAGE OF ORDERS IN THE QUEUE VS. THE SYSTEM: 66.6%
396
398
LAST DOWNLOAD TIME: 06:00 PM
ELAPSED TIME SINCE LAST DOWNLOAD: 04:32
400
LAST UPLOAD TIME: 06:00 PM
ELAPSED TIME SINCE LAST UPLOAD: 04:32

FIG. 15

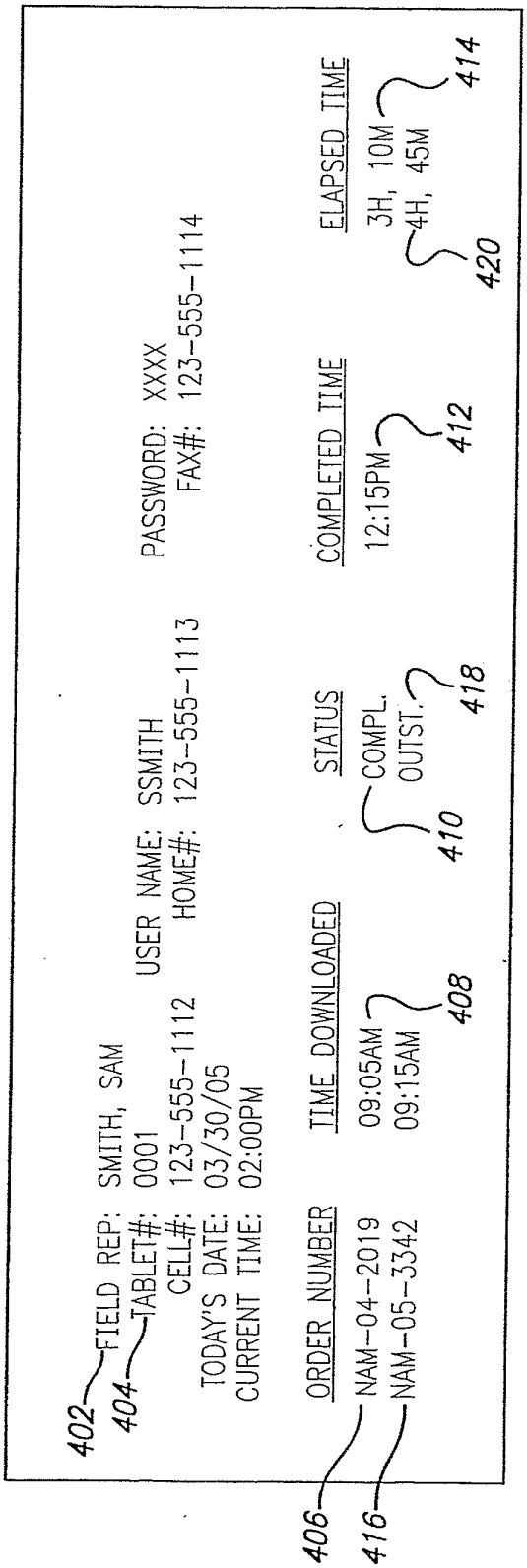

TABLET ORDER TRACKING - DETAIL REPORT
402
FIELD REP: SMITH, SAM
404
TABLET#: 0001
USER NAME: SSMITH
PASSWORD: XXXX
CELL#: 123-555-1112
HOME#: 123-555-1113
FAX#: 123-555-1114
TODAY'S DATE: 03/30/05
CURRENT TIME: 02:00PM
ORDER NUMBER
TIME DOWNLOADED
STATUS
COMPLETED TIME
ELAPSED TIME
406
NAM-04-2019
09:05AM
COMPL.
12:15PM
3H, 10M
416
NAM-05-3342
09:15AM
OUTST.
4H, 45M
408
410
412
414
418
420

FIG. 16

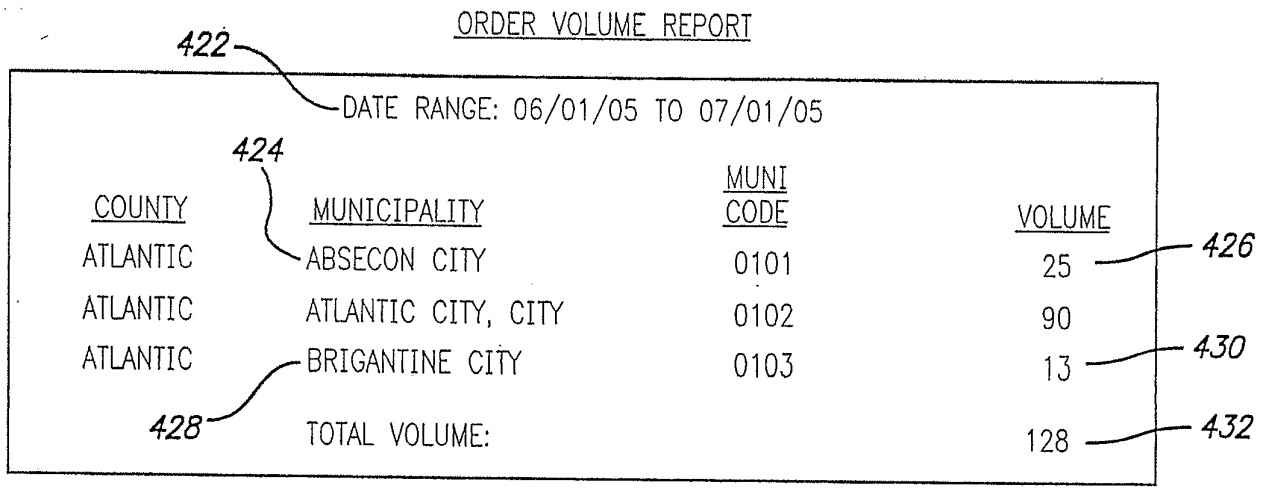


FIG. 17

REJECTED DURING ORDER PROCESSING–DETAIL REPORT

DATE: 03/30/05

TITLE# (434)	CLIENT	BLOCK#	LOT#	QUAL	MUNICIPALITY	DATE TIME REC.	REASON (436)
NAM-04-2019	NOA-C	27	2		WEST LONG BRANCH	03/30/05-09:05AM	NO MATCH IN PROPERTY MASTER FILE
NAM-05-2254 (438)	NOA-X	33	9		FREEHOLD BORO	03/30/05-09:20AM	NO MATCH IN PROPERTY DATA DATABASE (440)

(DISPLAYED FROM OLDEST TO NEWEST)

FIG. 18

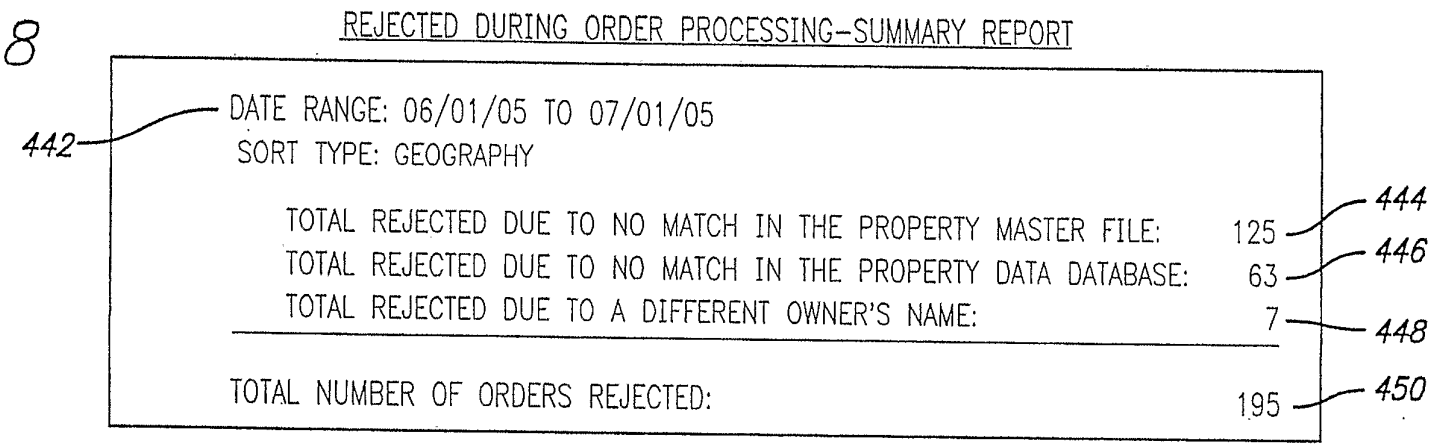


FIG. 19

REJECTED DURING PROOFING-DETAIL REPORT

DATE: 06/01/05 TO 07/01/05 — 452
FIELD REP: CRAIG

TITLE#	CLIENT	BLOCK#	LOT# (454)	QUAL	MUNICIPALITY	DATE TIME REC.	REASON (456)
NAM-04-2019	NOA-C	27	2		WEST LONG BRANCH	03/30/05-09:05AM	MISSING WATER COMMENT
NAM-05-2254	NOA-X	33	9 (458)		FREEHOLD BORO	03/30/05-09:20AM	MATH ERROR ON TAXES (460)

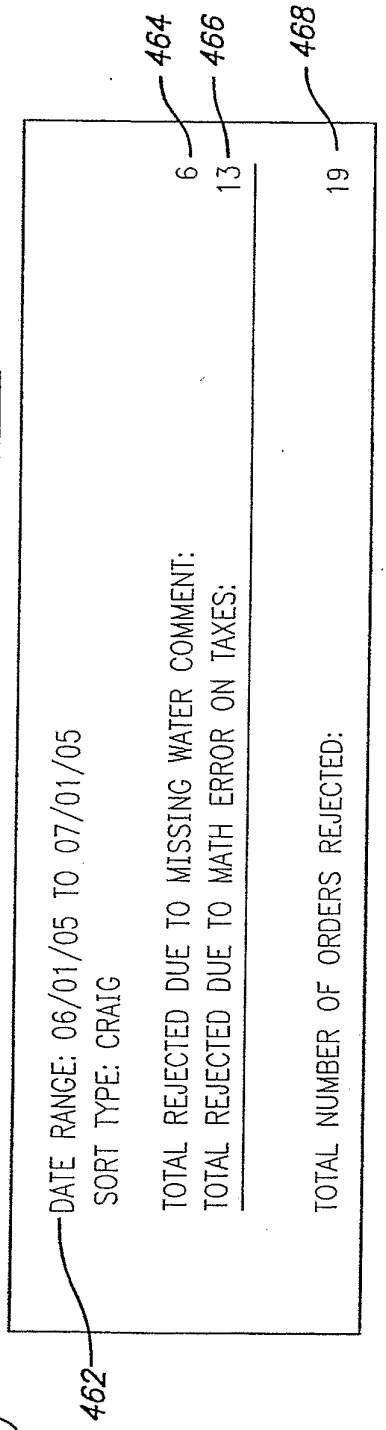
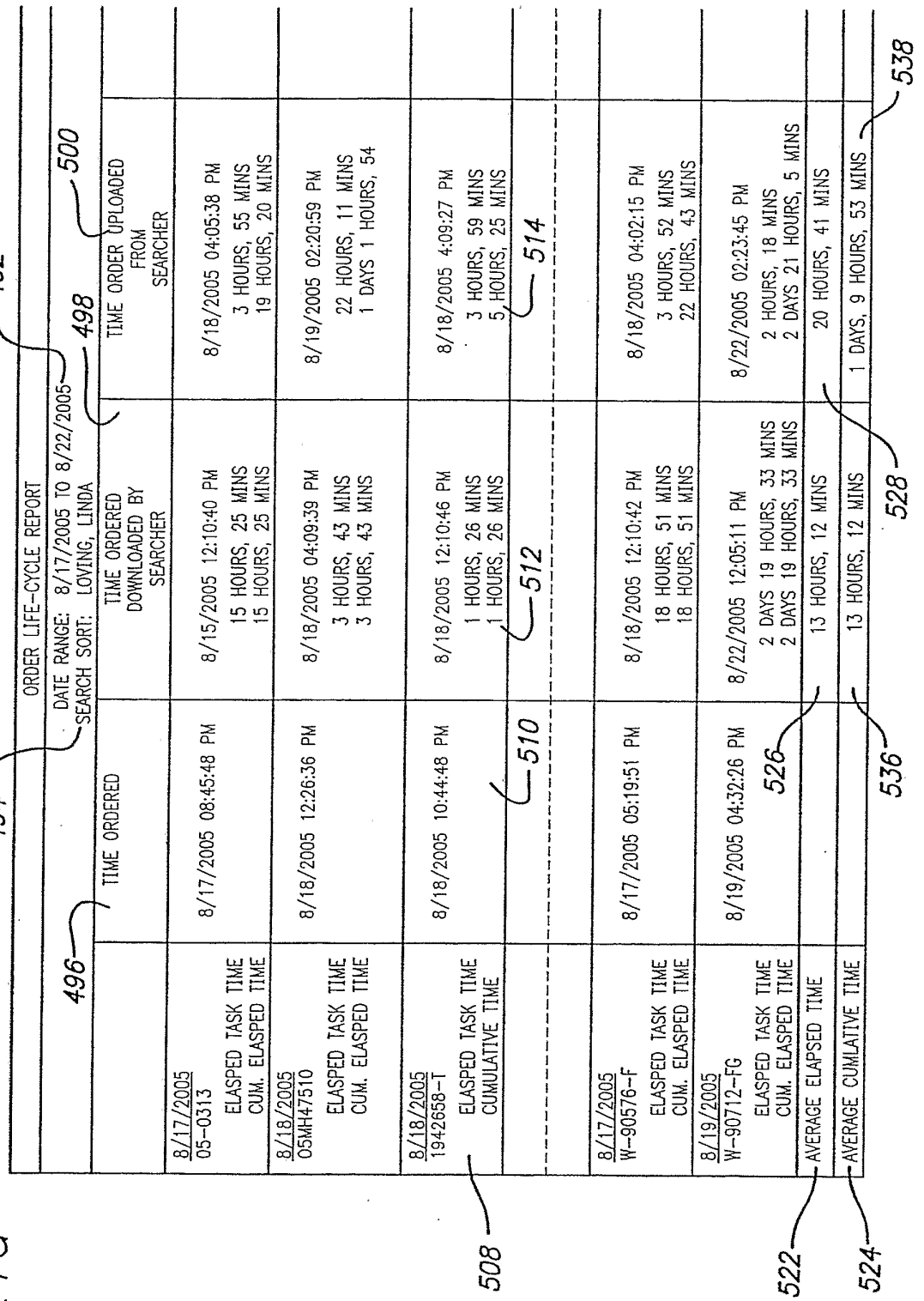

REJECTED DURING ORDER PROCESSING-SUMMARY REPORT
DATE RANGE: 06/01/05 TO 07/01/05
SORT TYPE: CRAIG
TOTAL REJECTED DUE TO MISSING WATER COMMENT: 6
TOTAL REJECTED DUE TO MATH ERROR ON TAXES: 13
TOTAL NUMBER OF ORDERS REJECTED: 19
462
464
466
468

FIG. 20

FIG. 21a

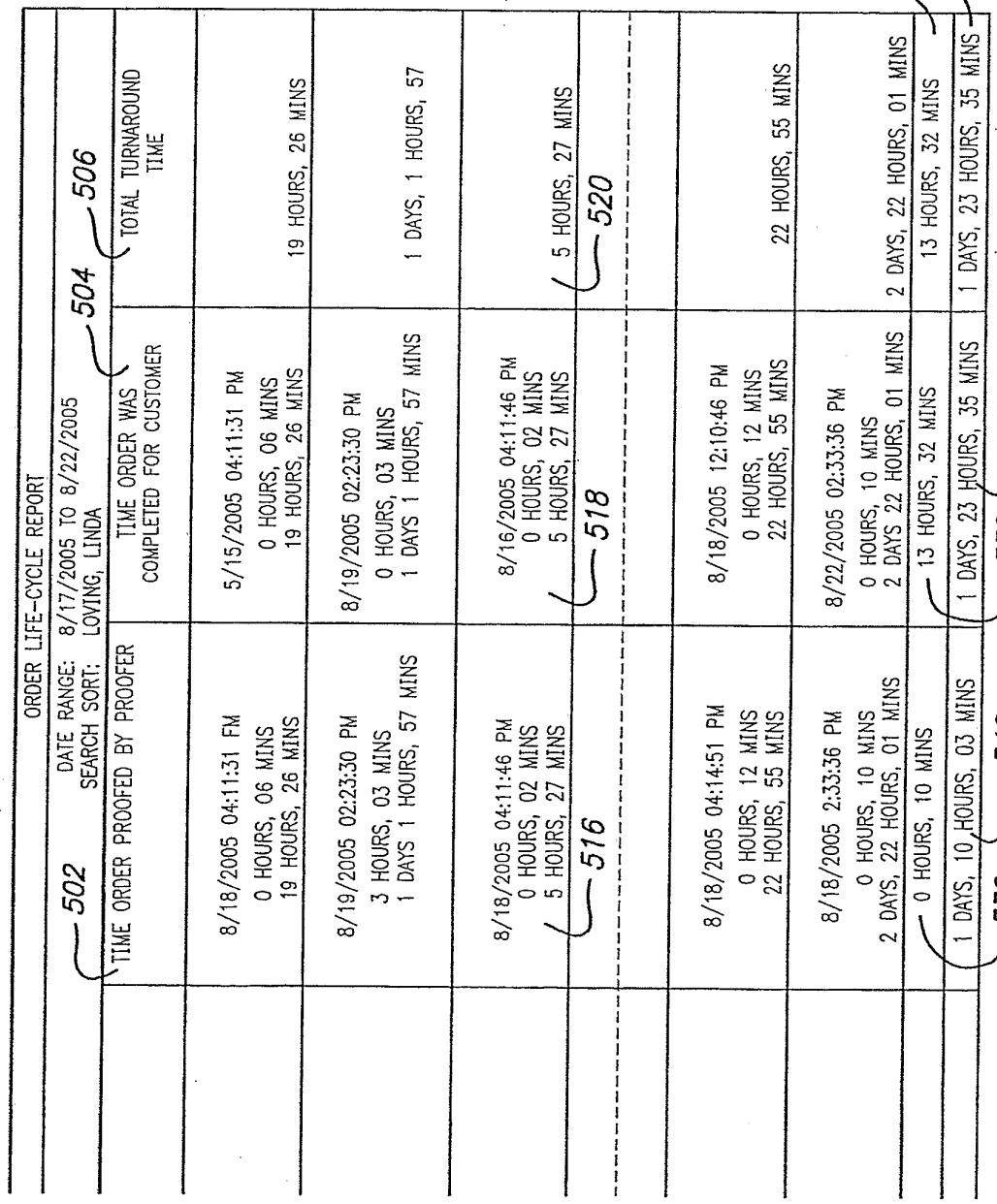


ORDER LIFE-CYCLE REPORT

DATE RANGE: 8/17/2005 TO 8/22/2005
SEARCH SORT: LOVING, LINDA

	TIME ORDERED	TIME ORDERED DOWNLOADED BY SEARCHER	TIME ORDER UPLOADED FROM SEARCHER
8/17/2005 05-0313	8/17/2005 08:45:48 PM	8/15/2005 12:10:40 PM	8/18/2005 04:05:38 PM
ELASPED TASK TIME		15 HOURS, 25 MINS	3 HOURS, 55 MINS
CUM. ELASPED TIME		15 HOURS, 25 MINS	19 HOURS, 20 MINS
8/18/2005 05MH47510	8/18/2005 12:26:36 PM	8/18/2005 04:09:39 PM	8/19/2005 02:20:59 PM
ELASPED TASK TIME		3 HOURS, 43 MINS	22 HOURS, 11 MINS
CUM. ELASPED TIME		3 HOURS, 43 MINS	1 DAYS 1 HOURS, 54
8/18/2005 1942658-T	8/18/2005 10:44:48 PM	8/18/2005 12:10:46 PM	8/18/2005 4:09:27 PM
ELASPED TASK TIME		1 HOURS, 26 MINS	3 HOURS, 59 MINS
CUMULATIVE TIME		1 HOURS, 26 MINS	5 HOURS, 25 MINS
8/17/2005 W-90576-F	8/17/2005 05:19:51 PM	8/18/2005 12:10:42 PM	8/18/2005 04:02:15 PM
ELASPED TASK TIME		18 HOURS, 51 MINS	3 HOURS, 52 MINS
CUM. ELASPED TIME		18 HOURS, 51 MINS	22 HOURS, 43 MINS
8/19/2005 W-90712-FG	8/19/2005 04:32:26 PM	8/22/2005 12:05:11 PM	8/22/2005 02:23:45 PM
ELASPED TASK TIME		2 DAYS 19 HOURS, 33 MINS	2 HOURS, 18 MINS
CUM. ELASPED TIME		2 DAYS 19 HOURS, 33 MINS	2 DAYS 21 HOURS, 5 MINS
AVERAGE ELAPSED TIME		13 HOURS, 12 MINS	20 HOURS, 41 MINS
AVERAGE CUMLATIVE TIME		13 HOURS, 12 MINS	1 DAYS, 9 HOURS, 53 MINS

FIG. 21b


ORDER LIFE-CYCLE REPORT
DATE RANGE: 8/17/2005 TO 8/22/2005
SEARCH SORT: LOVING, LINDA
502
504
506
TIME ORDER PROOFED BY PROOFER
TIME ORDER WAS COMPLETED FOR CUSTOMER
TOTAL TURNAROUND TIME
8/18/2005 04:11:31 FM
0 HOURS, 06 MINS
19 HOURS, 26 MINS
5/15/2005 04:11:31 PM
0 HOURS, 06 MINS
19 HOURS, 26 MINS
19 HOURS, 26 MINS
8/19/2005 02:23:30 PM
3 HOURS, 03 MINS
1 DAYS 1 HOURS, 57 MINS
8/19/2005 02:23:30 PM
0 HOURS, 03 MINS
1 DAYS 1 HOURS, 57 MINS
1 DAYS, 1 HOURS, 57
8/18/2005 04:11:46 PM
0 HOURS, 02 MINS
5 HOURS, 27 MINS
8/16/2005 04:11:46 PM
0 HOURS, 02 MINS
5 HOURS, 27 MINS
5 HOURS, 27 MINS
516
518
520
8/18/2005 04:14:51 PM
0 HOURS, 12 MINS
22 HOURS, 55 MINS
8/18/2005 12:10:46 PM
0 HOURS, 12 MINS
22 HOURS, 55 MINS
22 HOURS, 55 MINS
8/18/2005 2:33:36 PM
0 HOURS, 10 MINS
2 DAYS, 22 HOURS, 01 MINS
8/22/2005 02:33:36 PM
0 HOURS, 10 MINS
2 DAYS 22 HOURS, 01 MINS
2 DAYS, 22 HOURS, 01 MINS
534
0 HOURS, 10 MINS
13 HOURS, 32 MINS
13 HOURS, 32 MINS
544
1 DAYS, 10 HOURS, 03 MINS
1 DAYS, 23 HOURS, 35 MINS
1 DAYS, 23 HOURS, 35 MINS
530
540
532
542