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(54) **ELECTRONIC BILL PROCESSING WITH BILL NORMALIZATION AND TEMPLATING**

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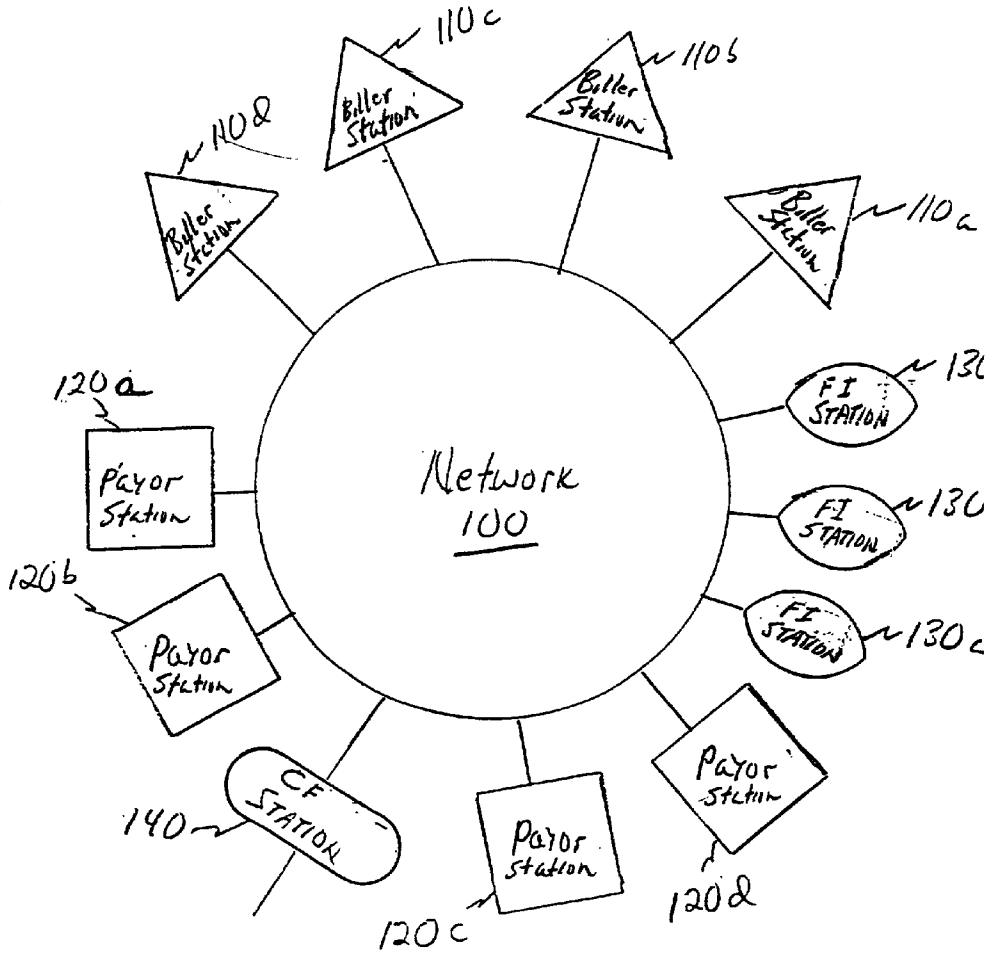
(52) **U.S. Cl.** **705/40**

(57) **ABSTRACT**

A method of electronically presenting billing information, includes receiving billing information associated with a plurality of different billers, different portions of which represent bills for different payors. Requests are received from respective payors for current billing information, responsive to which bill presentment information corresponding to the applicable portion of the billing information is transmitted to the requesting payor.



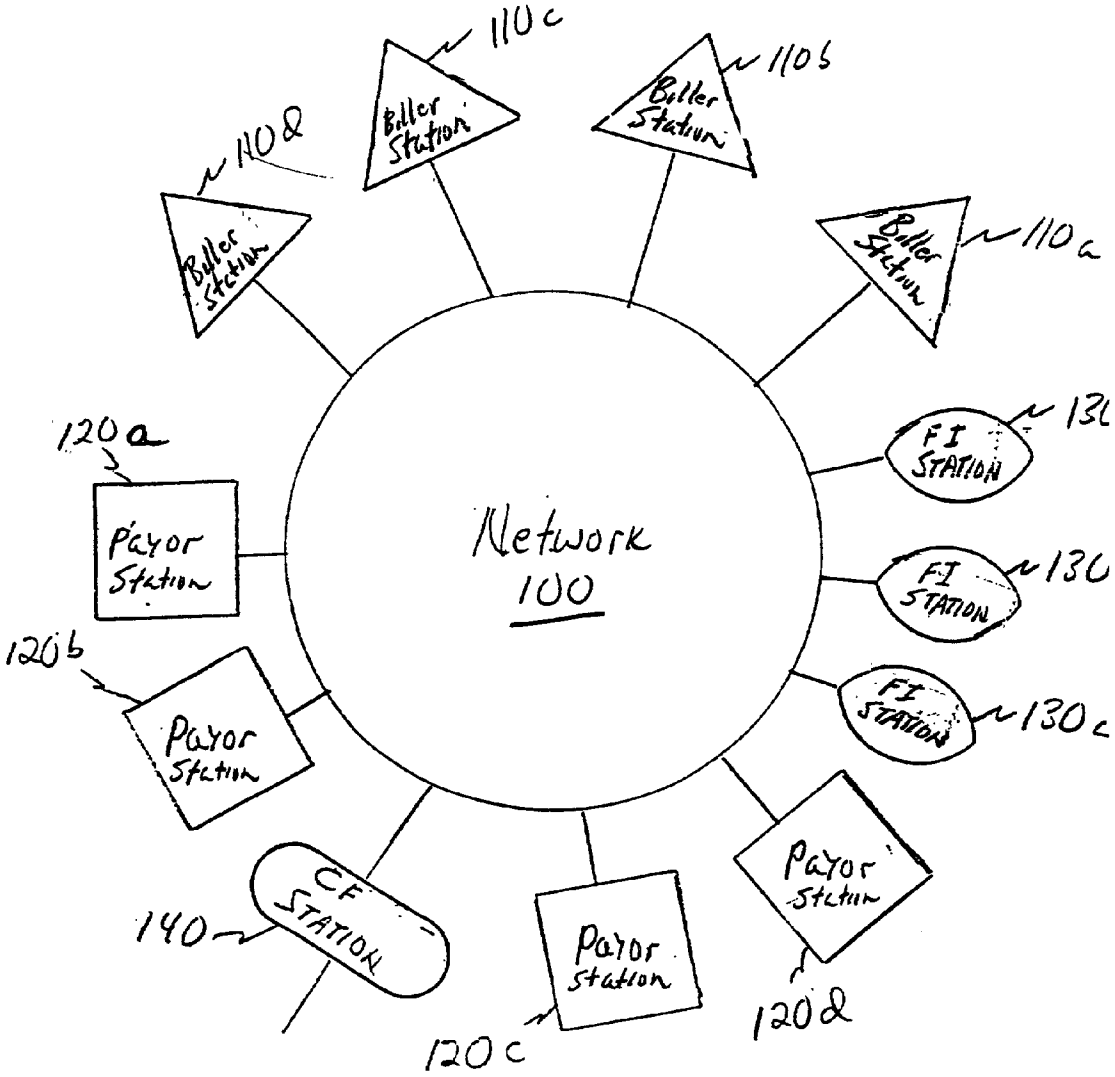

Network
100
Biller Station
110c
Biller Station
110b
Biller Station
110a
Biller Station
110d
FI STATION
130
FI STATION
130b
FI STATION
130c
Payor Station
120a
Payor Station
120b
CF STATION
140
Payor Station
120c
Payor Station
120d

FIGURE 1

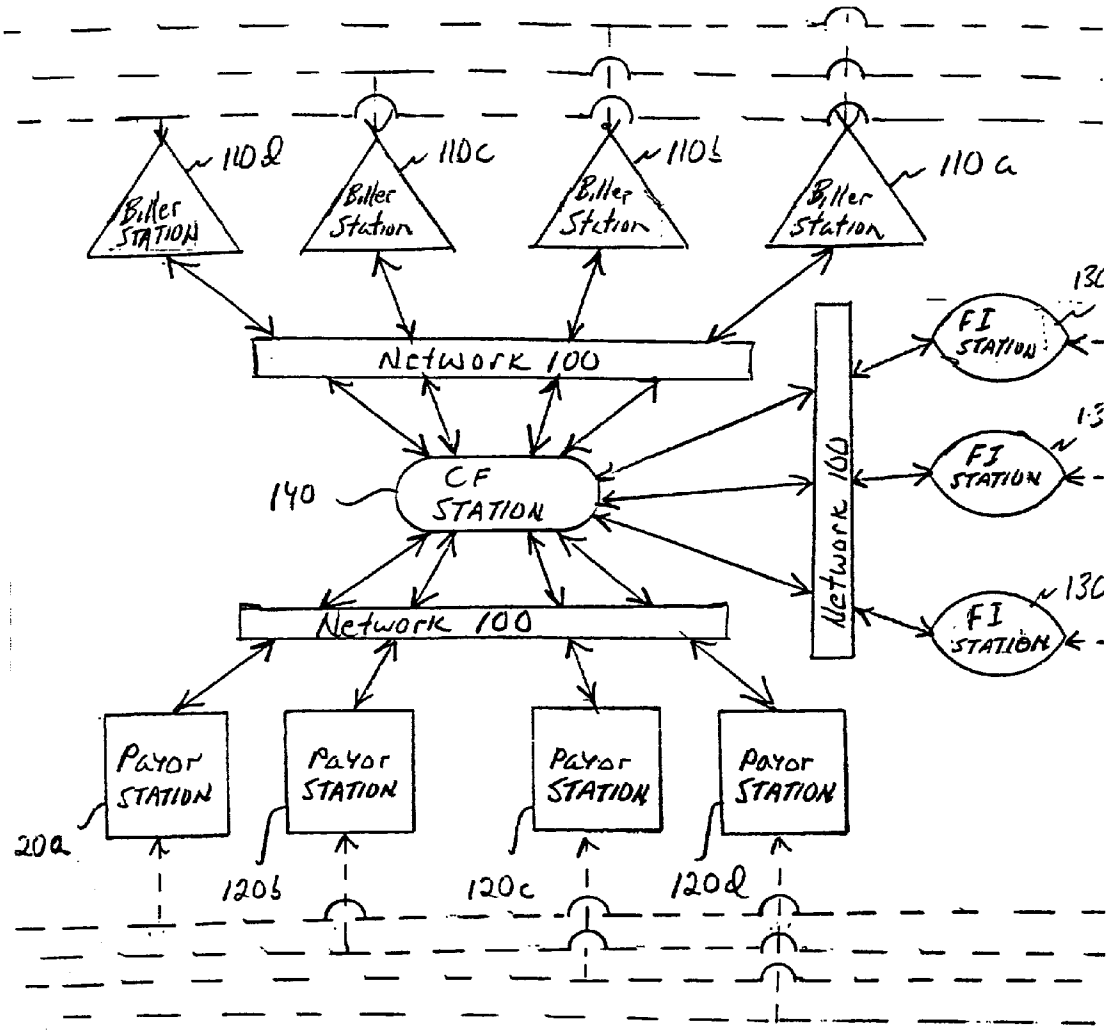

110a
110b
110c
110d
Biller Station
Biller Station
Biller Station
Biller Station
Network 100
Network 100
Network 100
CF STATION
140
FI STATION
FI STATION
FI STATION
130
130
130
Payor STATION
Payor STATION
Payor STATION
Payor STATION
120a
120b
120c
120d

FIGURE 2

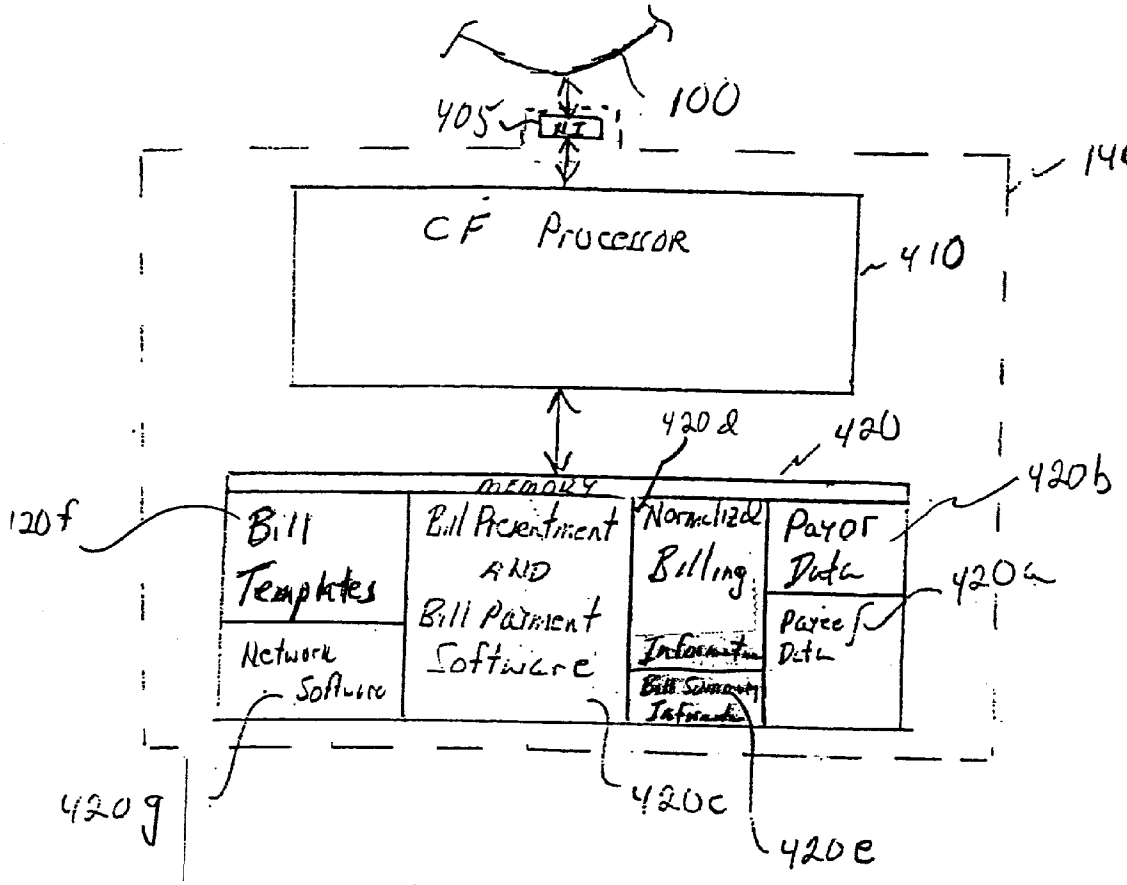

100
405
NI
140
CF Processor
410
420
420a
420b
420c
420d
420e
420f
420g
Memory
Bill Templates
Network Software
Bill Presentment AND Bill Payment Software
Normalized Billing Information
Bill Summary Information
Payor Data
Payee Data

FIGURE 2A

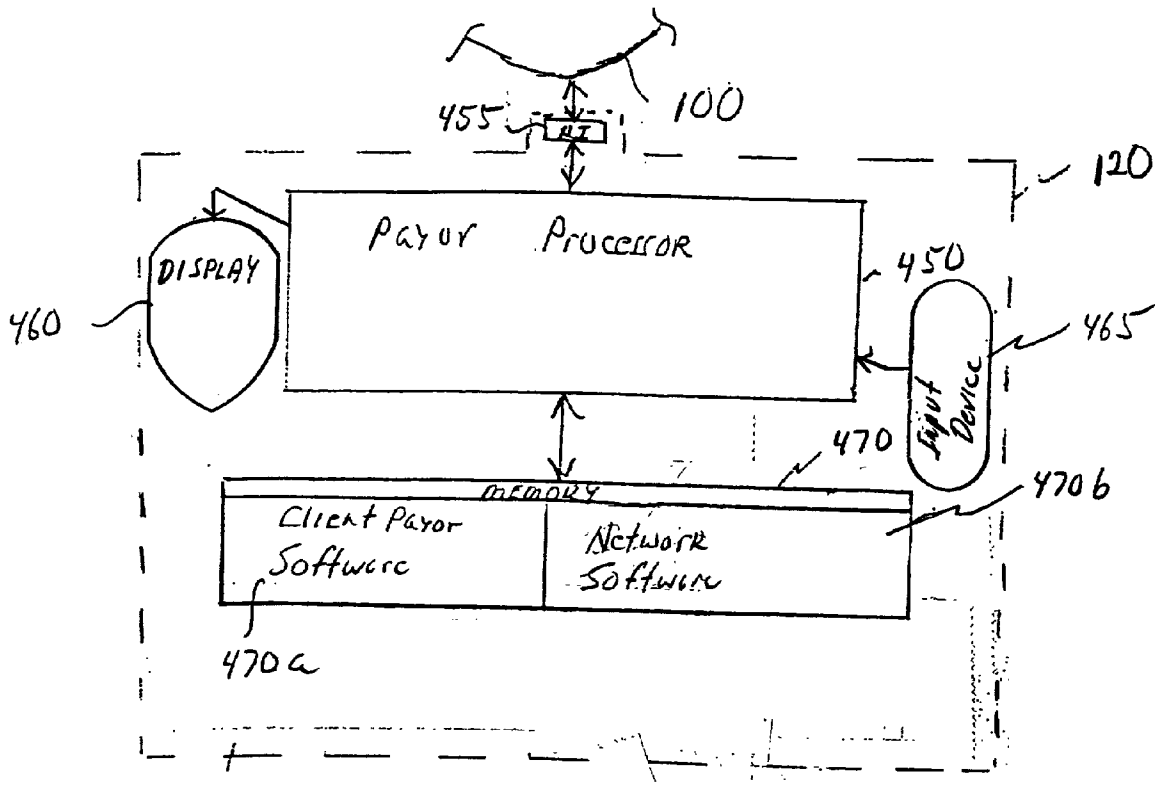

455
100
120
DISPLAY
Payor Processor
460
450
465
Input Device
470
MEMORY
470b
Client Payor Software
Network Software
470a

FIGURE 2B

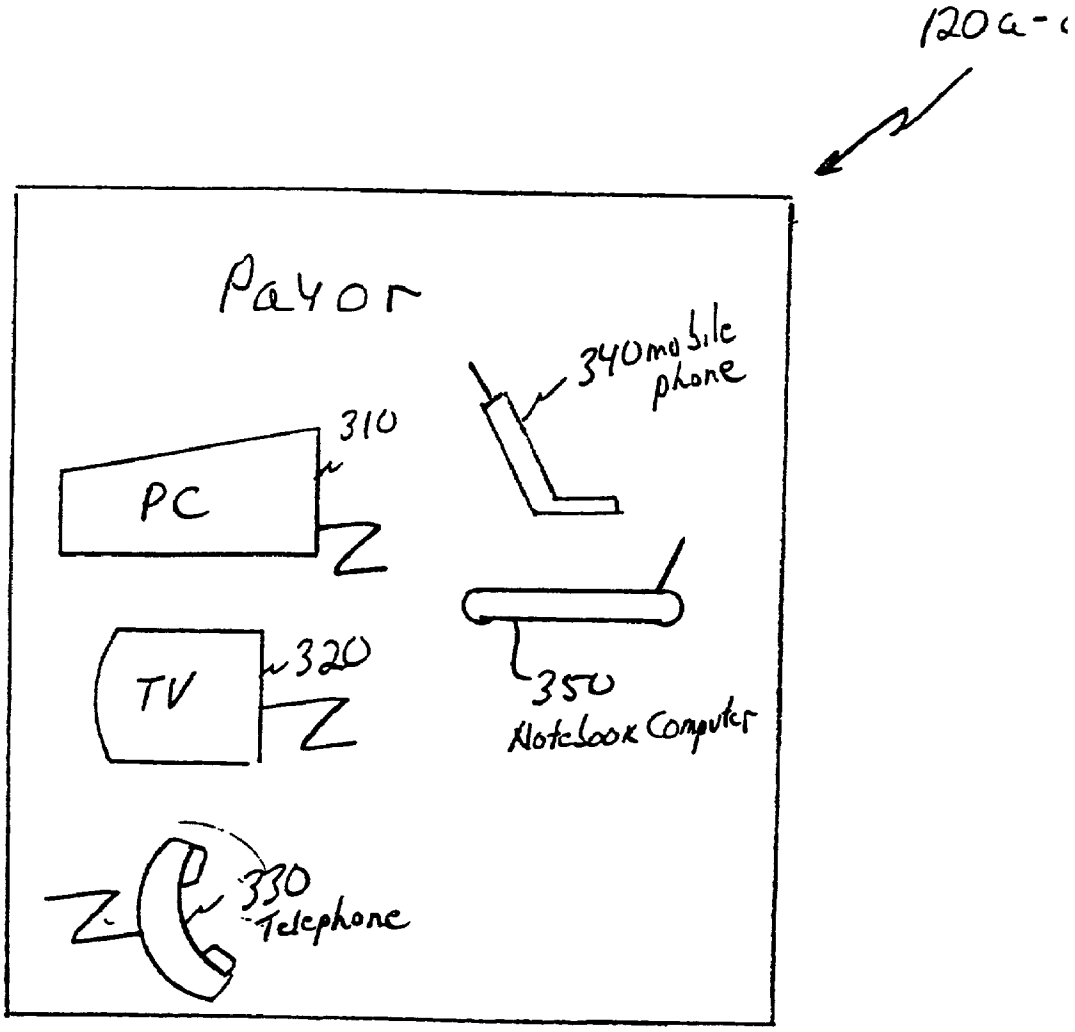

120a-c
Payor
340 mobile phone
310
PC
320
TV
350
Notebook Computer
330
Telephone

FIGURE 3

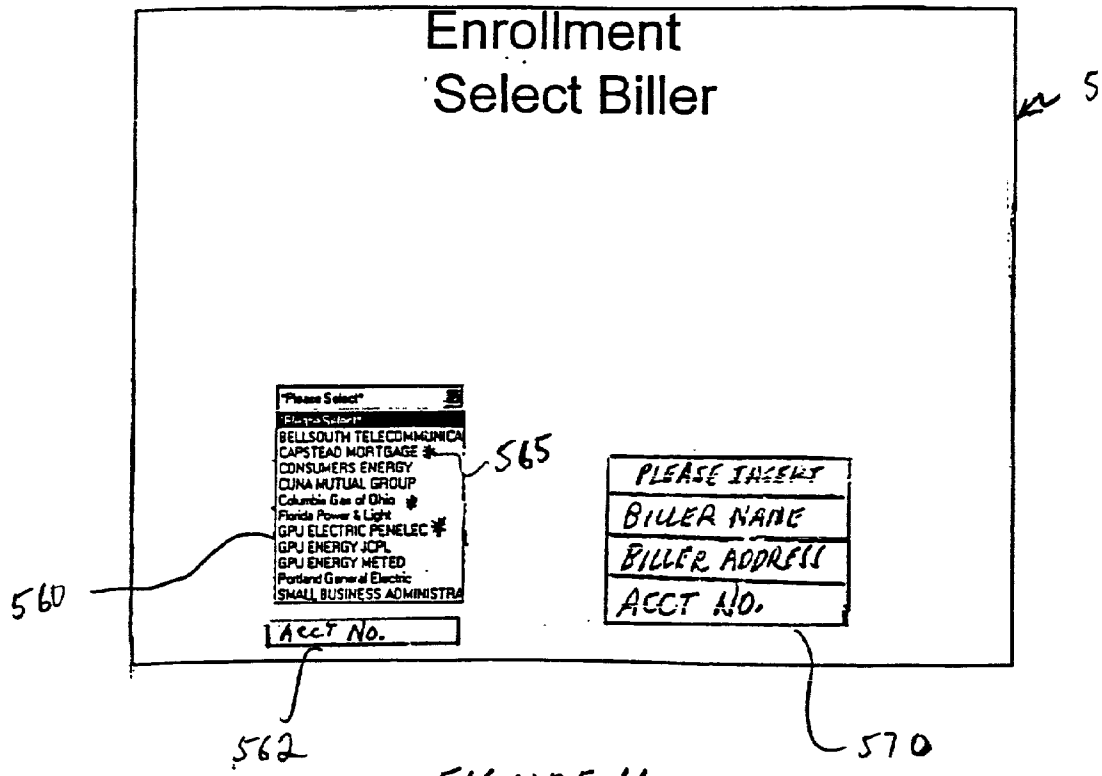
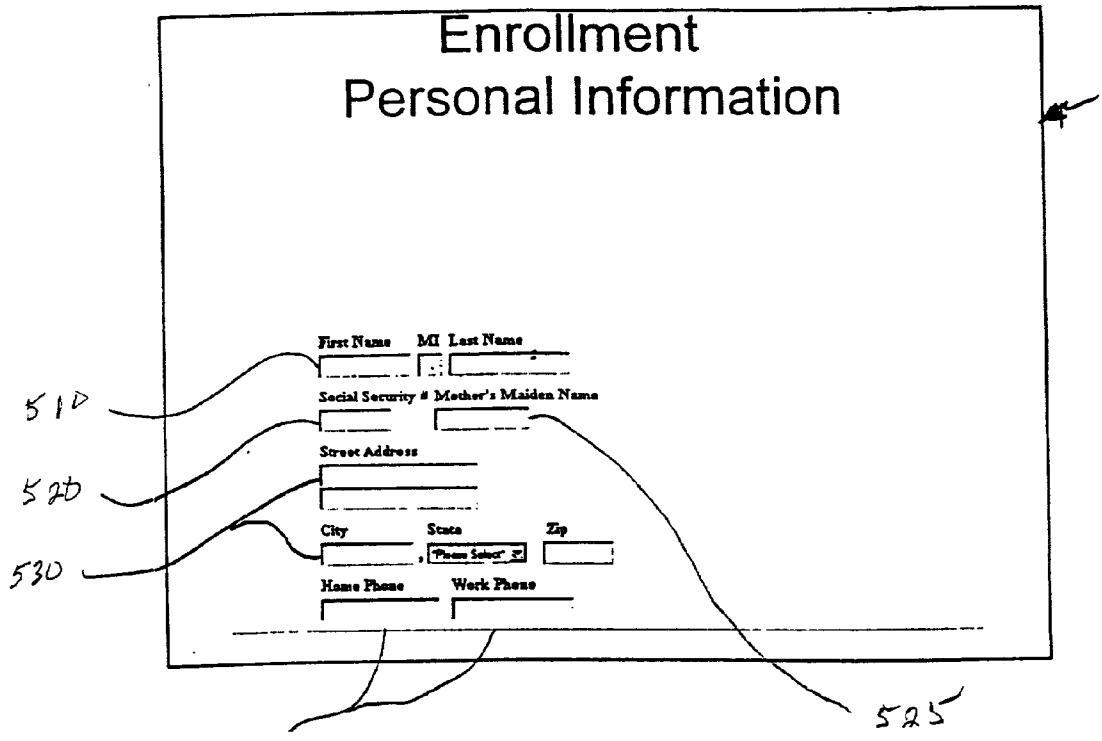

Enrollment
Select Biller
5
"Please Select"
BELLSOUTH TELECOMMUNICA
CAPSTEAD MORTGAGE
CONSUMERS ENERGY
CUNA MUTUAL GROUP
Columbia Gas of Ohio
Florida Power & Light
GPU ELECTRIC PENELEC
GPU ENERGY JCPL
GPU ENERGY METED
Portland General Electric
SMALL BUSINESS ADMINISTRA
565
560
ACCT NO.
562
PLEASE INSERT
BILLER NAME
BILLER ADDRESS
ACCT NO.
570

FIGURE 4


Enrollment
Personal Information
4
First Name
MI
Last Name
510
Social Security #
Mother's Maiden Name
520
Street Address
530
City
State
Zip
"Please Select"
Home Phone
Work Phone
525

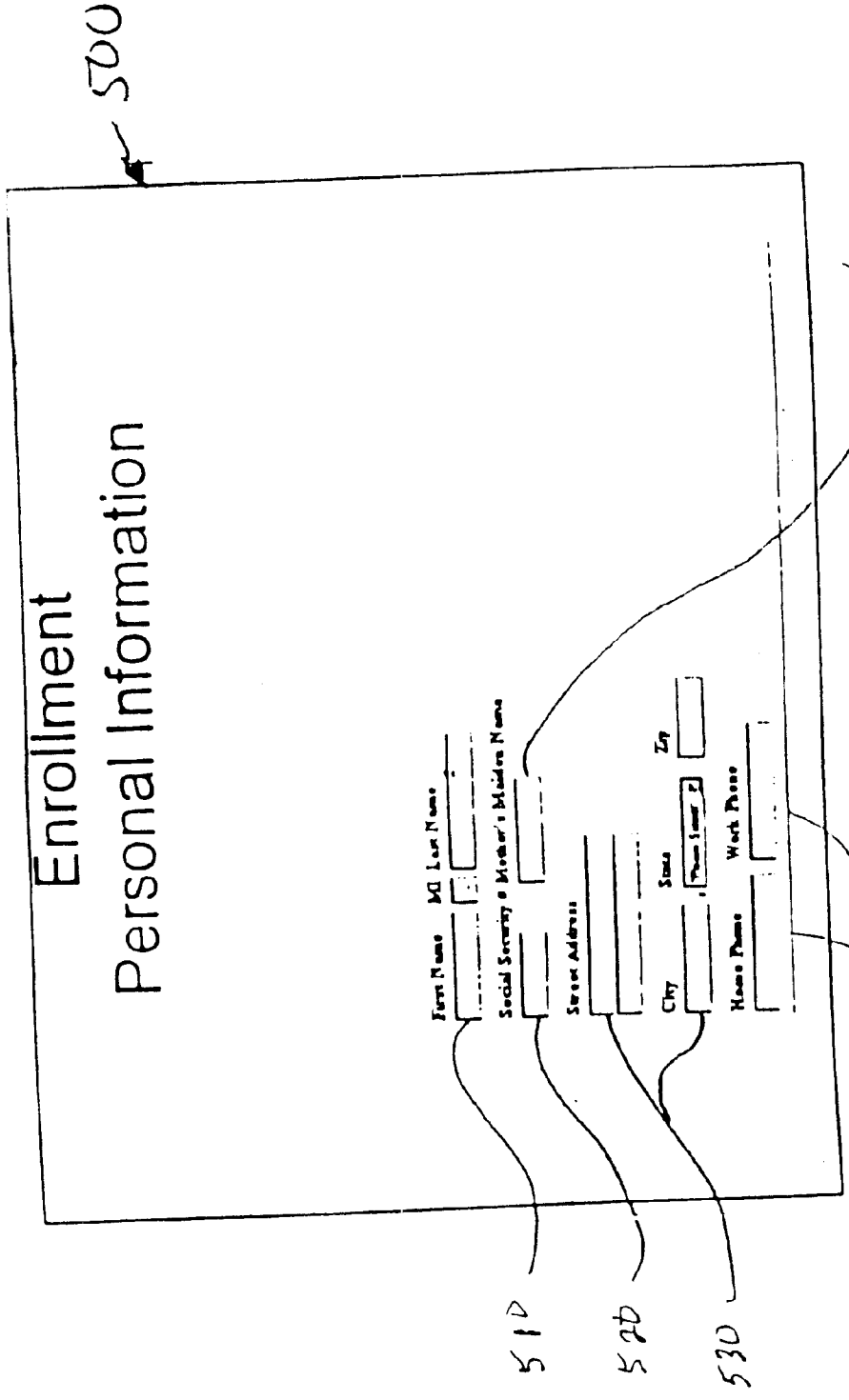

500
Enrollment
Personal Information
First Name
MI
Last Name
Social Security #
Mother's Maiden Name
Street Address
City
State
Zip
Home Phone
Work Phone
505
510
520
530
540

FIG 5

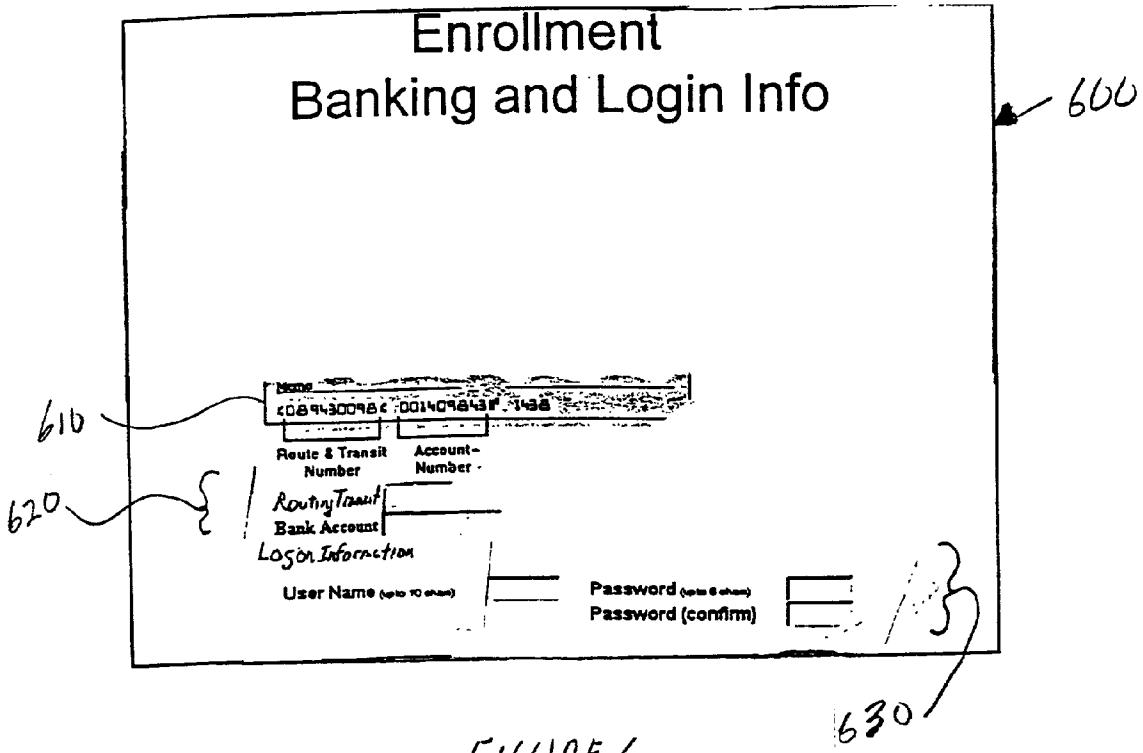

Enrollment
Banking and Login Info
600
610
620
630
Name
Route & Transit Number
Account Number
Routing Transit
Bank Account
Logon Information
User Name
Password
Password (confirm)

FIGURE 6

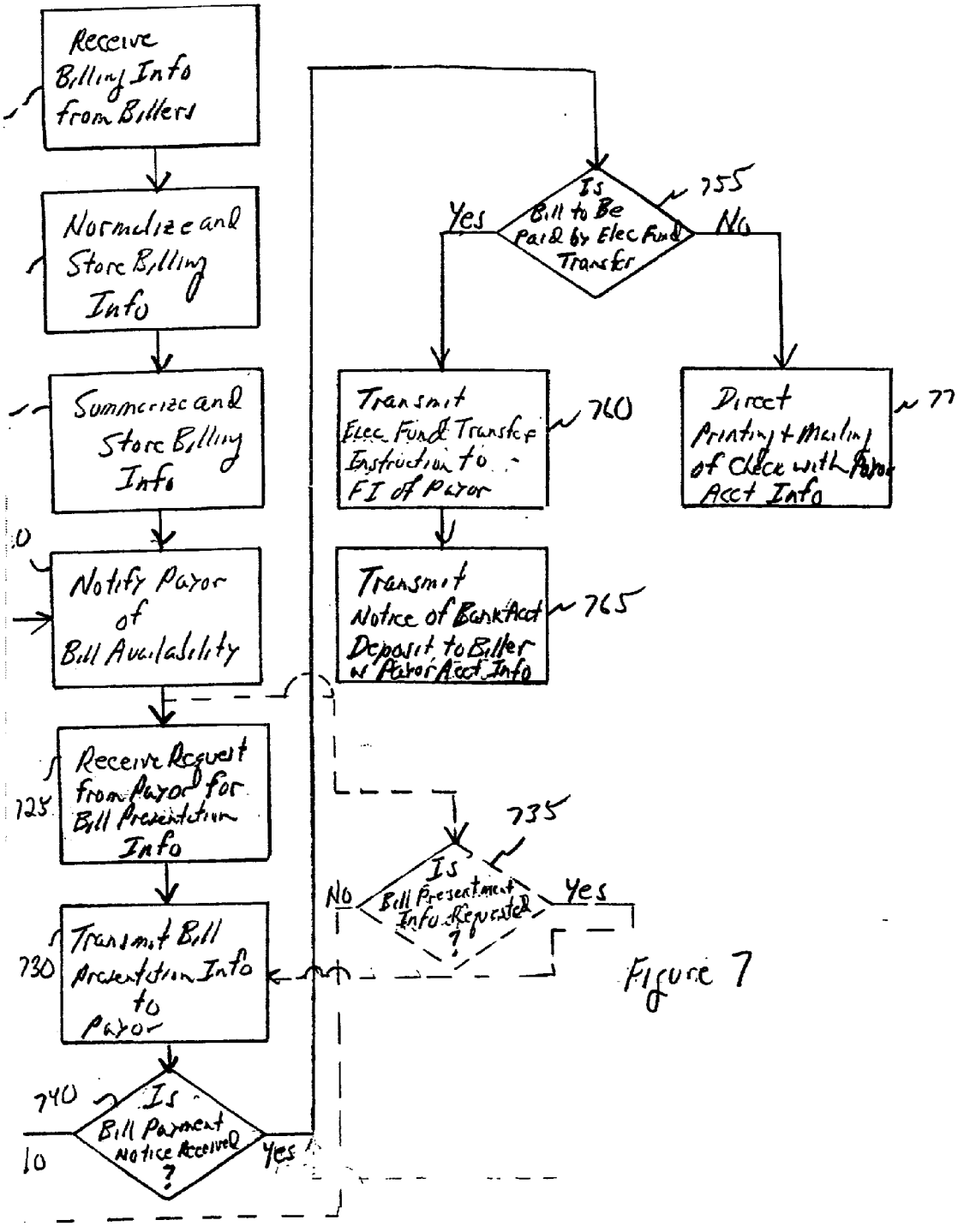

Receive Billing Info from Billers
Normalize and Store Billing Info
Summarize and Store Billing Info
Notify Payor of Bill Availability
Receive Request from Payor for Bill Presentation Info
725
Transmit Bill Presentation Info to Payor
730
Is Bill Payment Notice Received ?
740
Yes
10
Is Bill to Be Paid by Elec Fund Transfer
755
Yes
No
Transmit Elec Fund Transfer Instruction to FI of Payor
760
Direct Printing + Mailing of Check with Payor Acct Info
77
Transmit Notice of Bank Acct Deposit to Biller or Payor Acct Info
765
Is Bill Presentment Info Requested ?
735
No
Yes

Figure 7

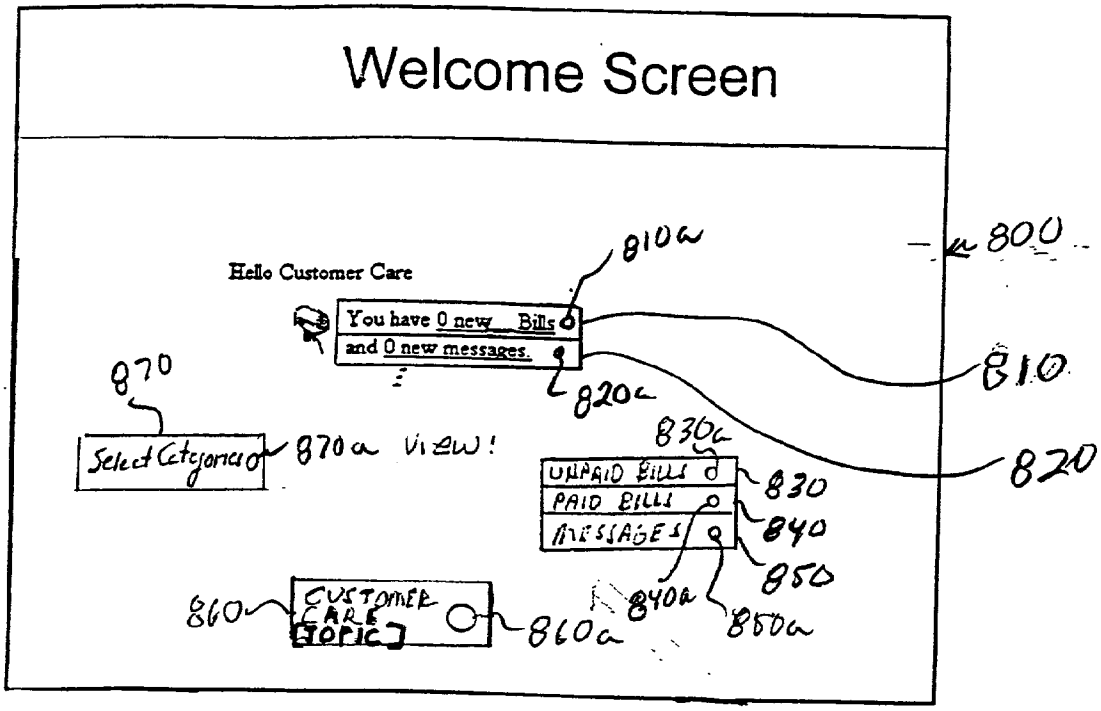


FIGURE 8

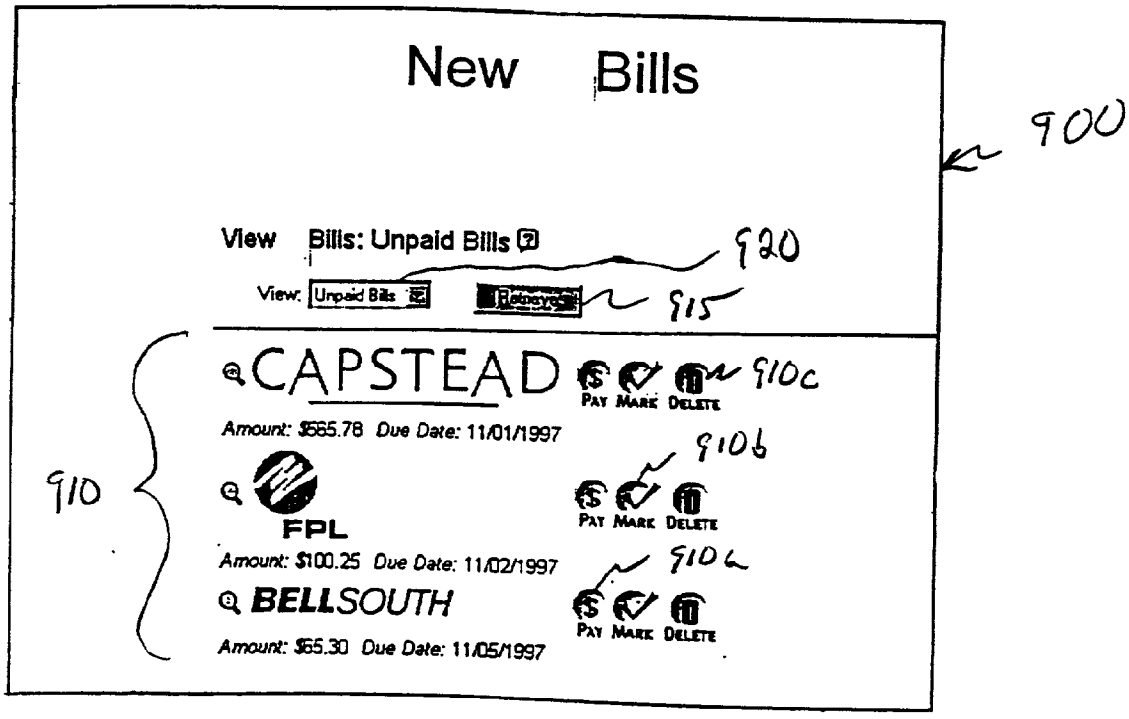


FIGURE 9A

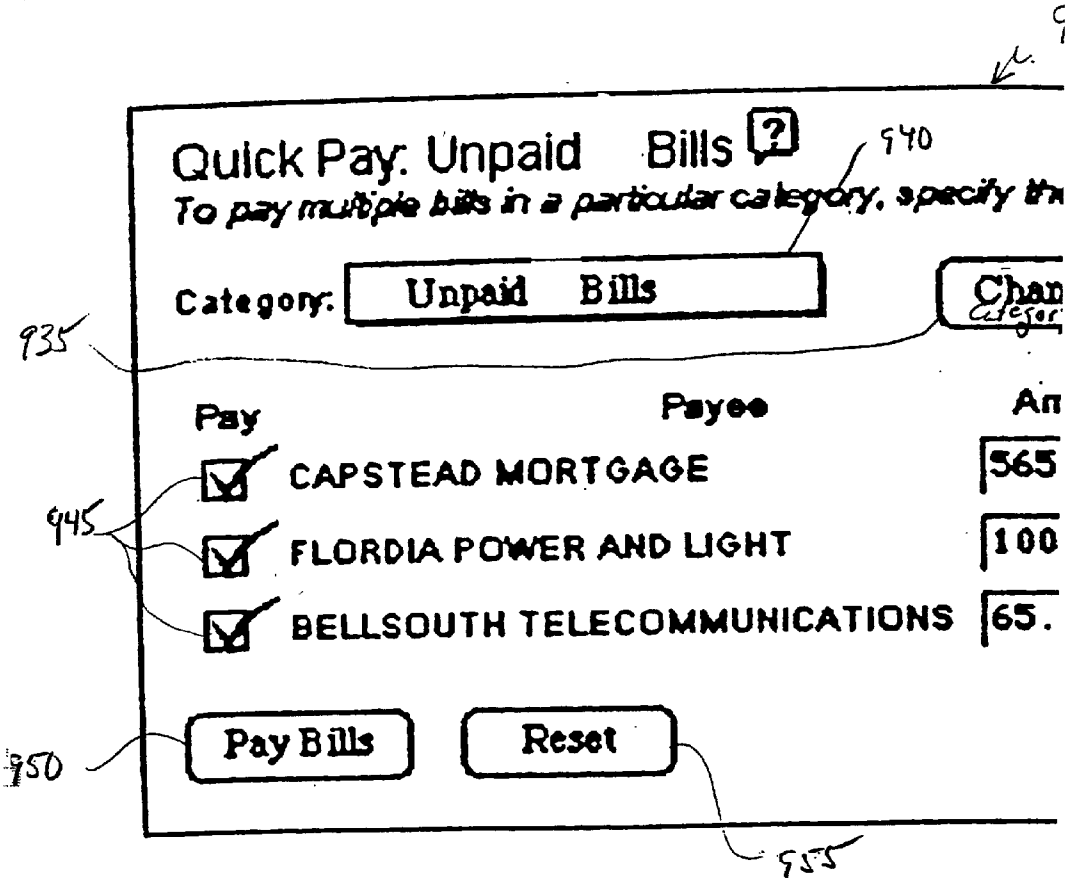

Quick Pay: Unpaid Bills
To pay multiple bills in a particular category, specify th
Category: Unpaid Bills
Chan
Pay
Payee
An
CAPSTEAD MORTGAGE
565
FLORDIA POWER AND LIGHT
100
BELLSOUTH TELECOMMUNICATIONS
65.
Pay Bills
Reset
940
935
945
950
955

FIGURE 9B

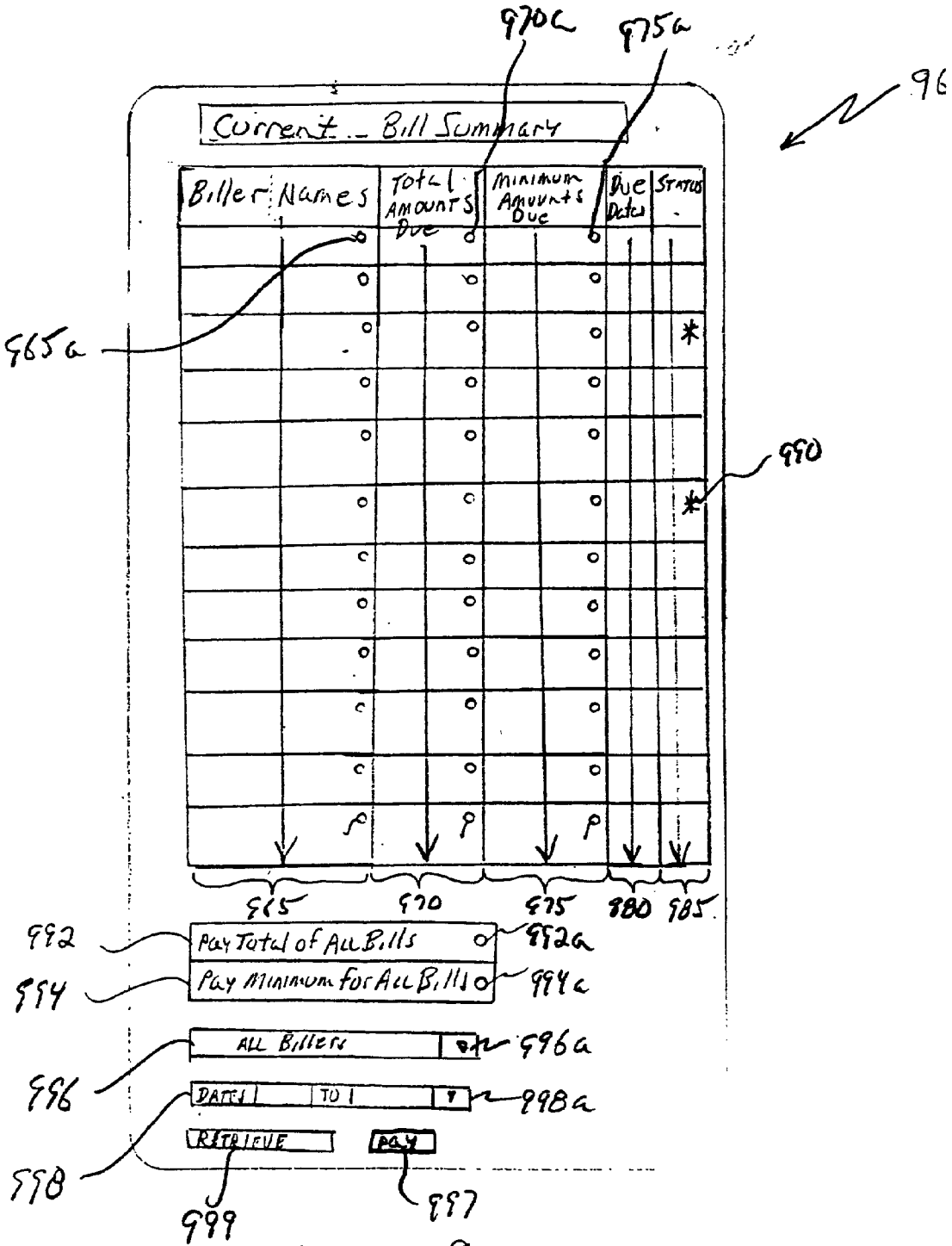

970c
975a
96
Current Bill Summary
Biller Names
Total Amounts Due
Minimum Amounts Due
Due Dates
Status
965a
980
985
970
975
992
Pay Total of All Bills
992a
994
Pay Minimum for All Bills
994a
ALL Billers
996a
996
DATE
TO
998a
998
RETRIEVE
PAY
999
997

FIGURE 9c

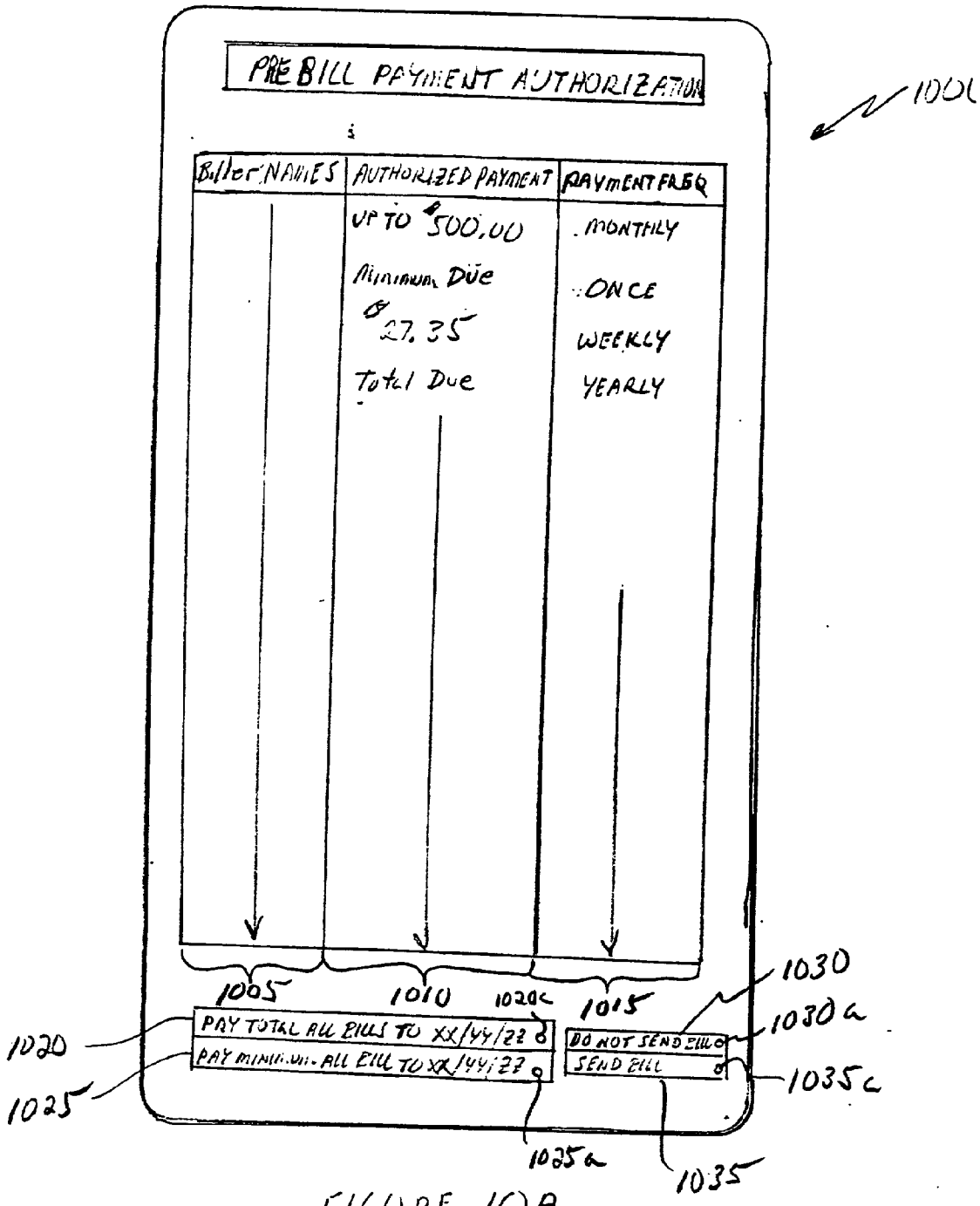

PRE BILL PAYMENT AUTHORIZATION
1000
Biller NAMES
AUTHORIZED PAYMENT
PAYMENT FREQ
UP TO $500.00
Minimum Due
$27.35
Total Due
MONTHLY
ONCE
WEEKLY
YEARLY
1005
1010
1020c
1015
1030
1030a
1020
PAY TOTAL ALL BILLS TO XX/YY/ZZ
DO NOT SEND BILL
1025
PAY MINIMUM ALL BILL TO XX/YY/ZZ
SEND BILL
1035c
1025a
1035

FIGURE 10A

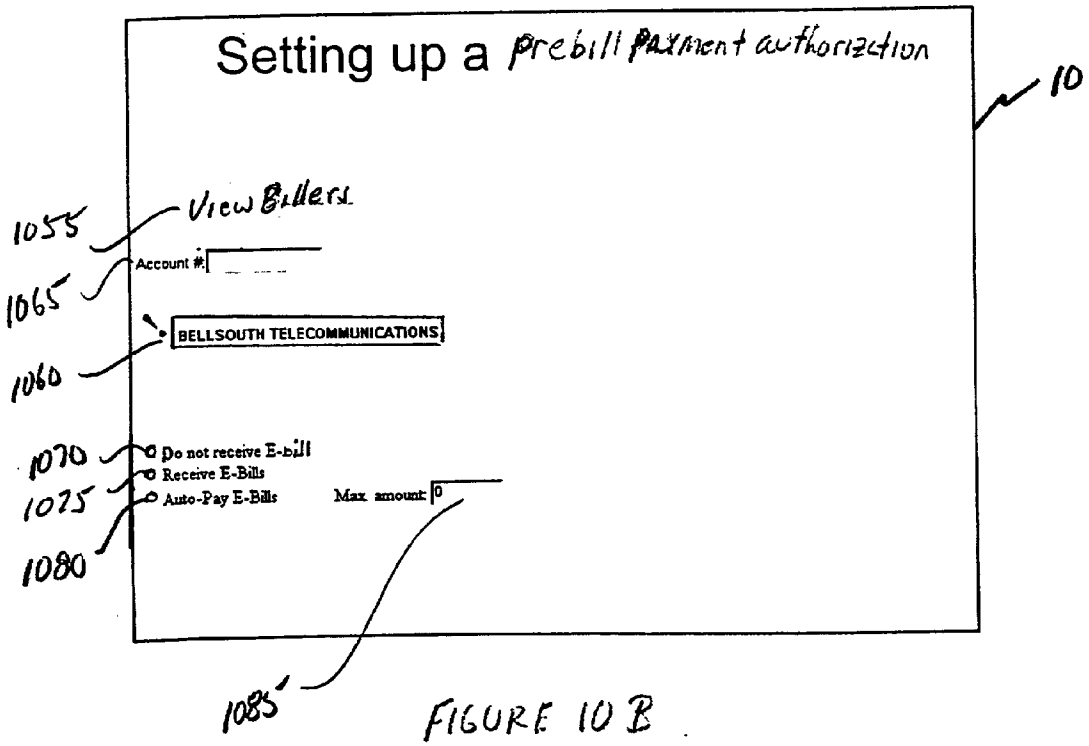

Setting up a prebill payment authorization
10
View Billers
1055
Account #:
1065
BELLSOUTH TELECOMMUNICATIONS
1060
Do not receive E-bill
Receive E-Bills
Auto-Pay E-Bills
Max. amount: 0
1070
1075
1080
1085

FIGURE 10B

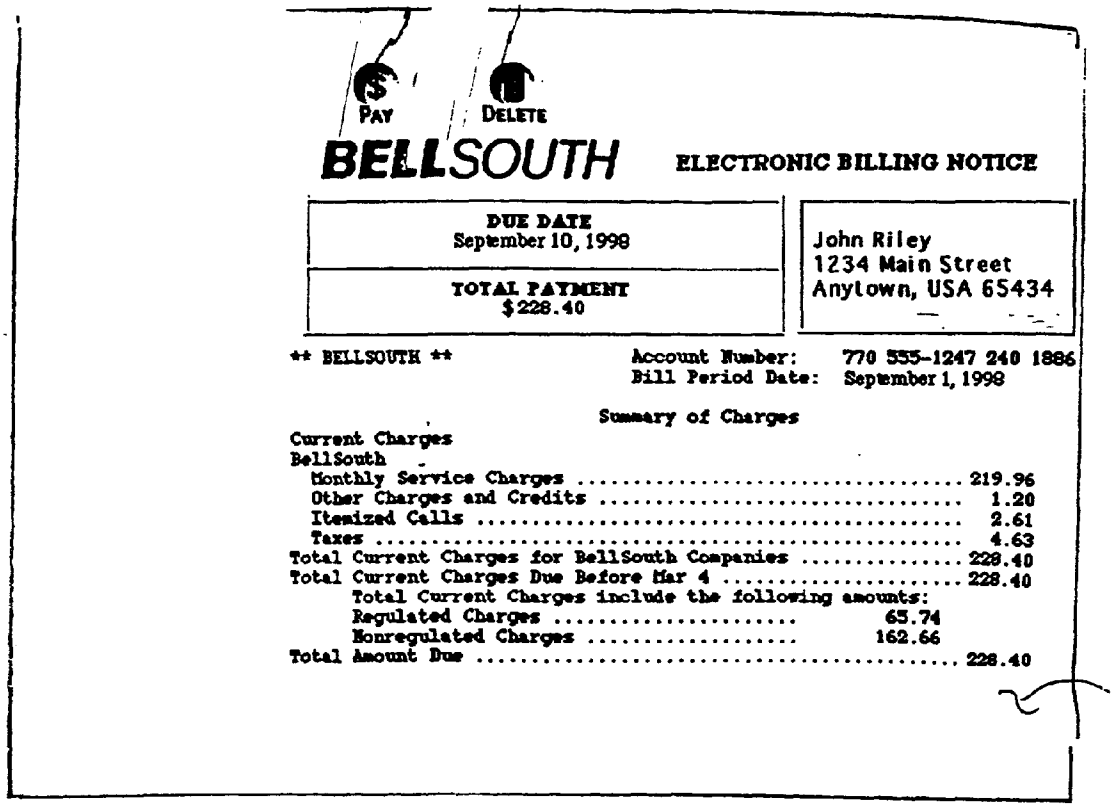


FIGURE 11

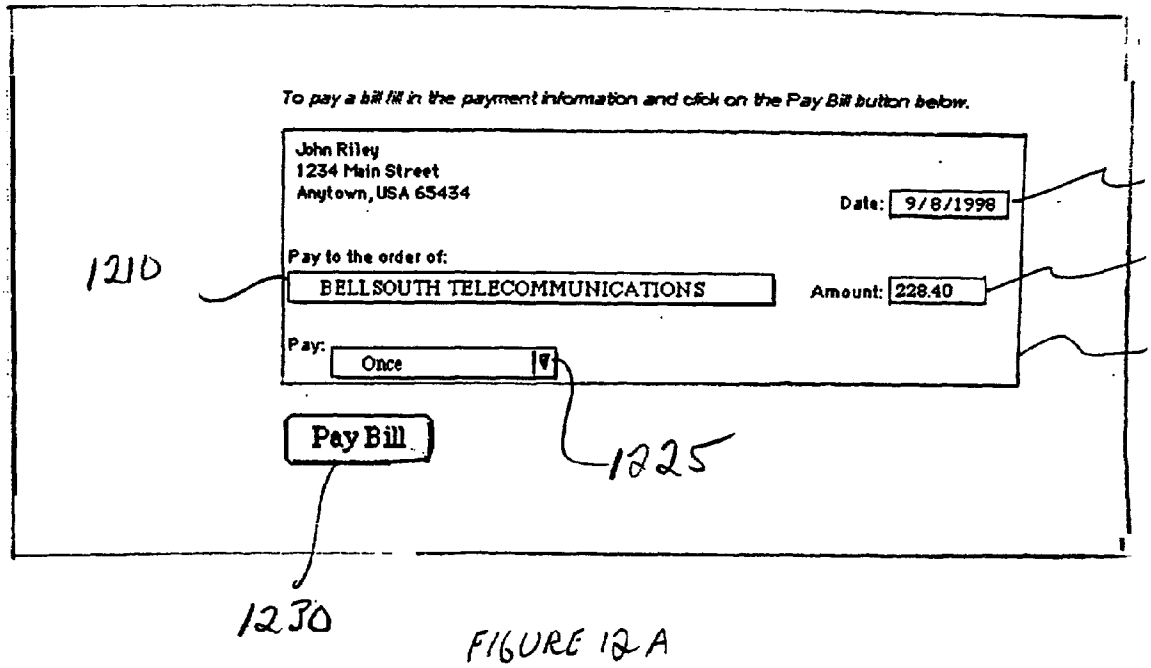


FIGURE 12A

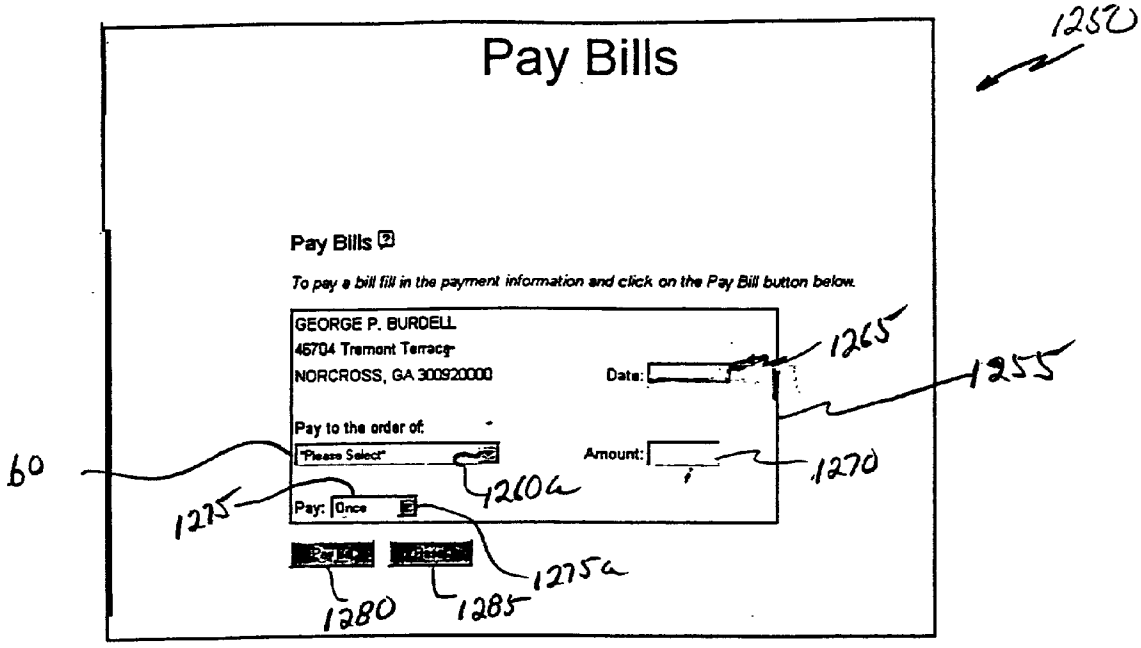
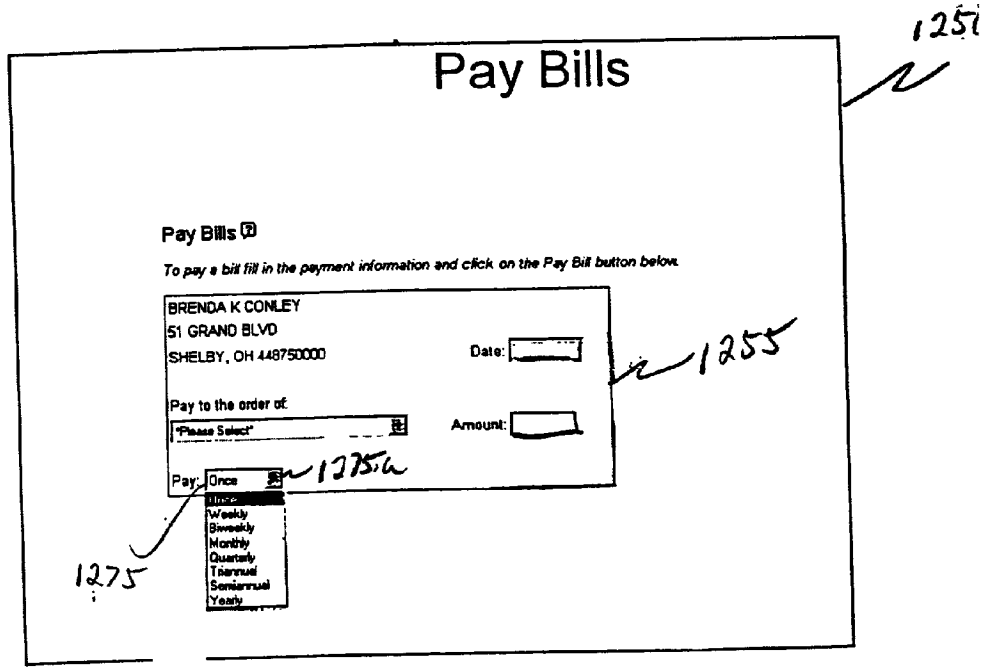

Pay Bills
1250
Pay Bills
To pay a bill fill in the payment information and click on the Pay Bill button below.
GEORGE P. BURDELL
45704 Tremont Terrace
NORCROSS, GA 300920000
Date:
1265
1255
Pay to the order of:
"Please Select"
Amount:
1270
60
1275
1260a
Pay: Once
1275a
1280
1285

FIGURE 12B


Pay Bills
1251
Pay Bills
To pay a bill fill in the payment information and click on the Pay Bill button below.
BRENDA K CONLEY
51 GRAND BLVD
SHELBY, OH 448750000
Date:
1255
Pay to the order of:
"Please Select"
Amount:
Pay: Once
1275a
Weekly
Biweekly
Monthly
Quarterly
Triannual
Semiannual
Yearly
1275

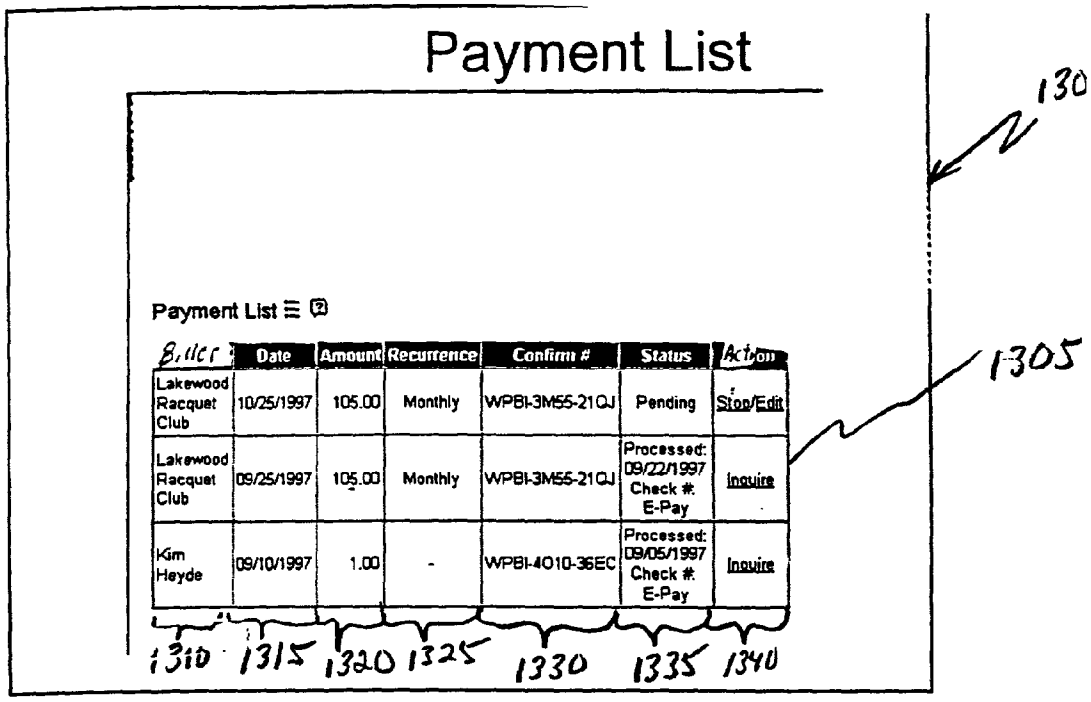
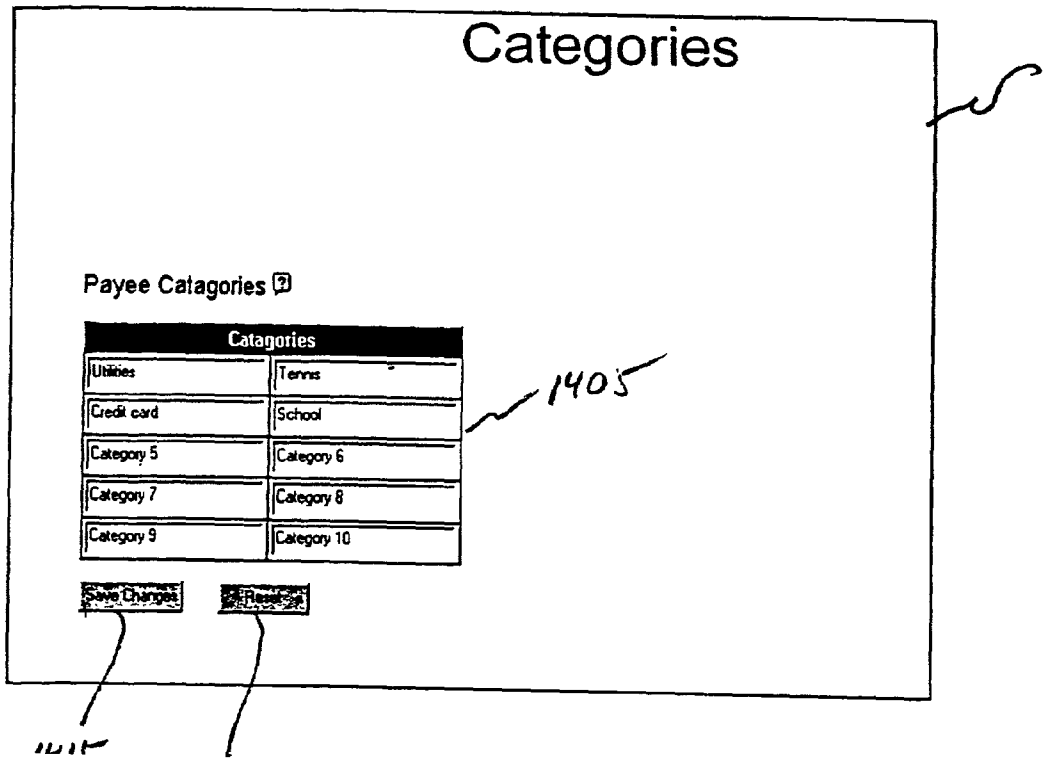

Payment List
130
Payment List
Biller
Date
Amount
Recurrence
Confirm #
Status
Action
Lakewood Racquet Club
10/25/1997
105.00
Monthly
WPBI-3M55-21QJ
Pending
Stop/Edit
Lakewood Racquet Club
09/25/1997
105.00
Monthly
WPBI-3M55-21QJ
Processed: 09/22/1997 Check #: E-Pay
Inquire
Kim Heyde
09/10/1997
1.00
-
WPBI-4O10-36EC
Processed: 09/05/1997 Check #: E-Pay
Inquire
1305
1310
1315
1320
1325
1330
1335
1340

FIGURE 13


Categories
Payee Catagories
Catagories
Utilities
Tennis
Credit card
School
Category 5
Category 6
Category 7
Category 8
Category 9
Category 10
1405
Save Changes
Reset

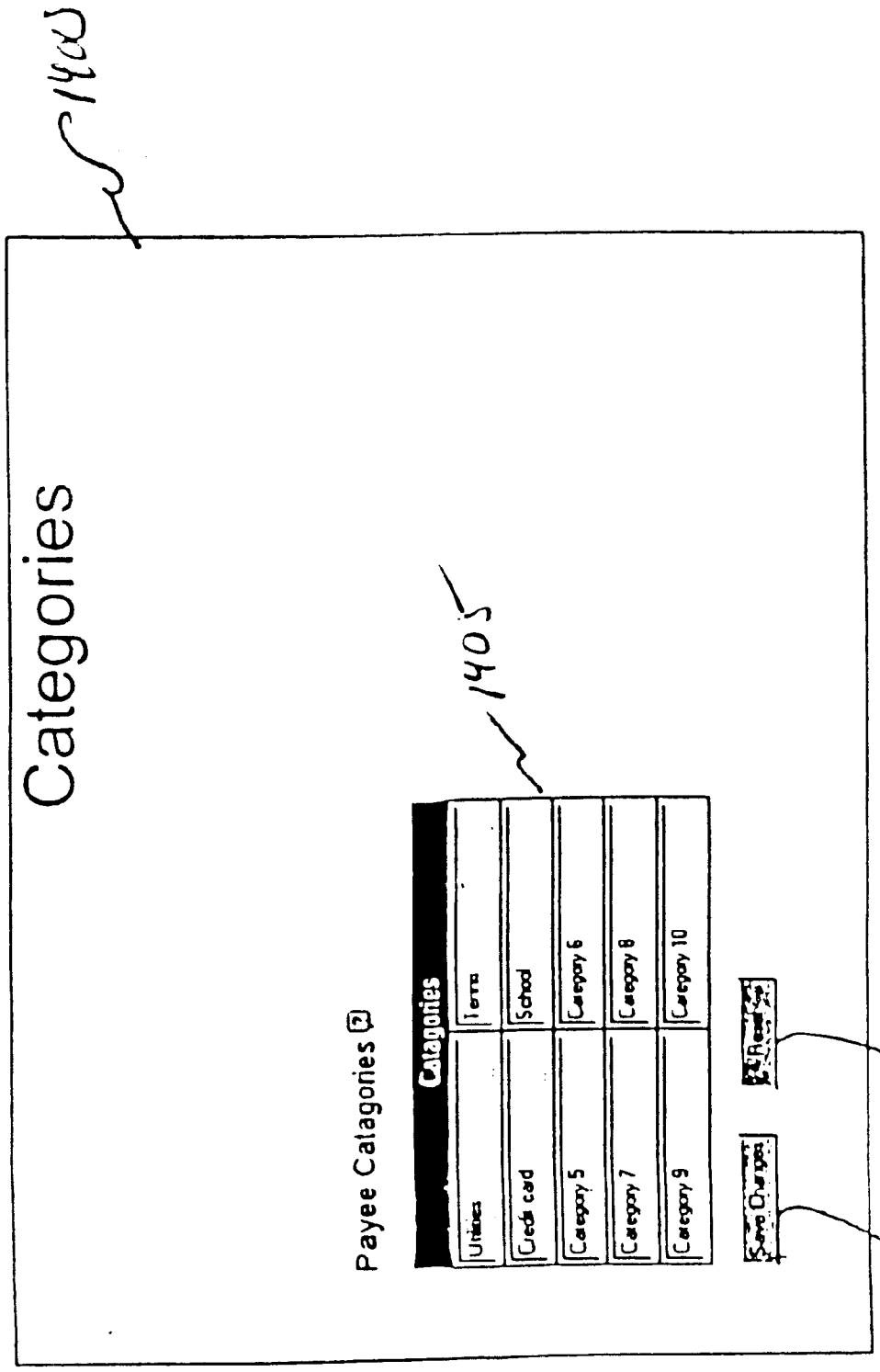

1405
Categories
Payee Catagories
Catagories
Utilities
Credit card
Category 5
Category 7
Category 9
Terms
School
Category 6
Category 8
Category 10
1415
1410

FIG. 14

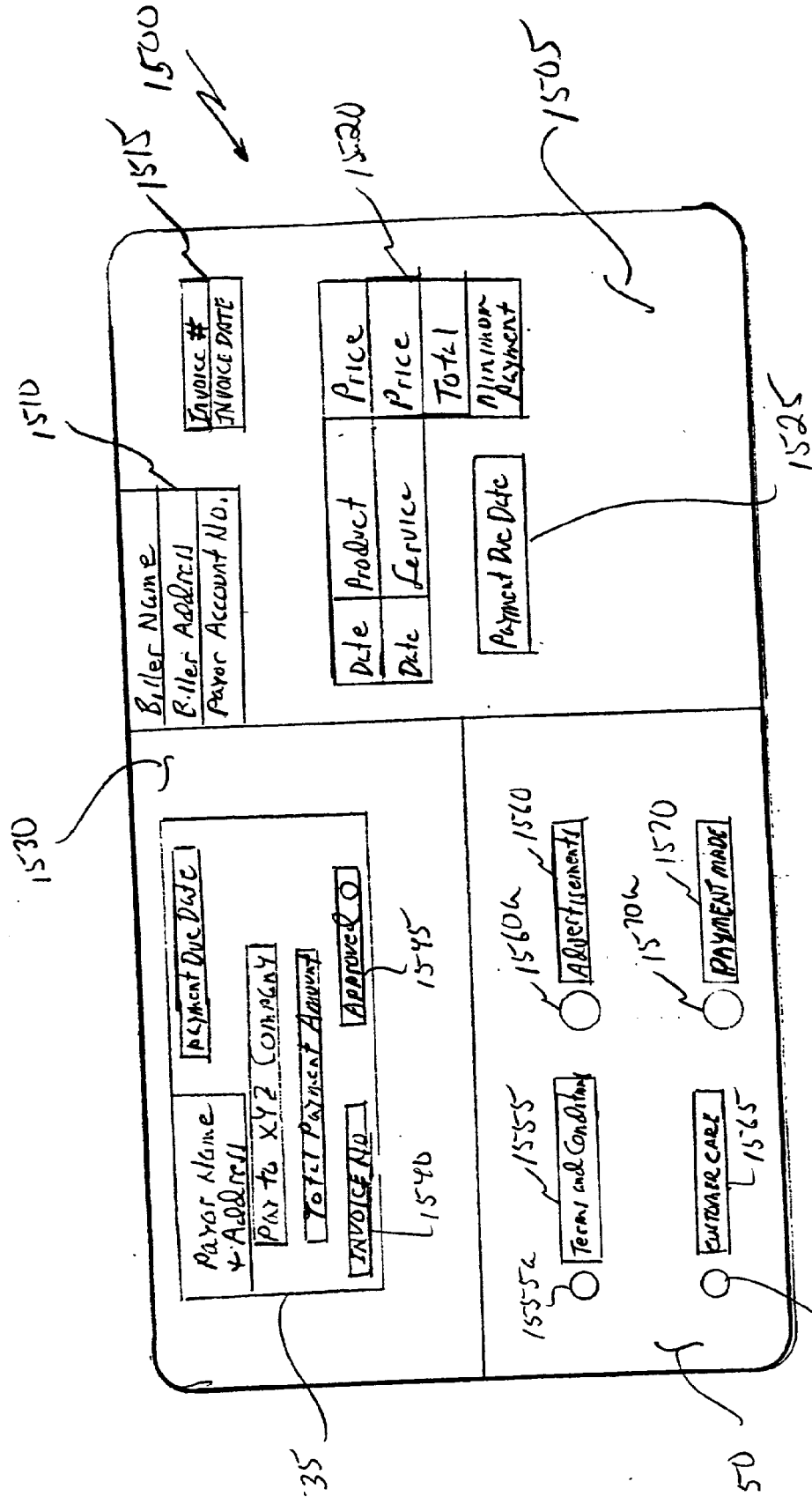

1500
1505
1510
1515
1520
1525
1530
1535
1540
1545
1550
1555
1555a
1560
1560a
1565
1565a
1570
1570a
Biller Name
Biller Address
Payor Account No.
Invoice #
INVOICE DATE
Date
Product
Price
Date
Service
Price
Total
Minimum Payment
Payment Due Date
Payor Name + Address
Payment Due Date
Pay to XYZ Company
Total Payment Amount
INVOICE No
Approved
Advertisements
Terms and Conditions
PAYMENT MADE
CUSTOMER CARE

FIGURE 15

ELECTRONIC BILL PROCESSING WITH BILL NORMALIZATION AND TEMPLATING

TECHNICAL FIELD

[0001] The present invention relates generally to electronic commerce and more particularly to electronic presentation of an aggregation of bills from different billers.

BACKGROUND ART

[0002] Historically the billing process has been a three party process. More particularly, the typical billing process consists of billers, such as merchants, utility companies, service providers and bankcard companies, preparing hardcopy paper bills either directly or through an independent bill preparation service provider. The bills normally consist of detailed billing information relating to the goods or services purchased or ordered, including a detailed itemization of the billed charges. The billing information also includes the total charge, due date for payment and, in many cases, the minimum amount which must be paid by the due date.

[0003] The hardcopy billing information relating to each individual biller is then placed in a separate envelope and mailed through the postal service to the applicable payor. The envelope may also be stuffed with other materials such as other product offerings, e.g., special discounts or new goods or services. Hence, each payor has historically received billing information from each biller as an individual hardcopy piece of correspondence received by mail.

[0004] Most, although not all, billers bill on a periodic basis, such as each calendar month or every thirty days. However, although billers may issue bills covering similar periods of time, e.g., thirty day periods, individual billers may have billing cycles and bill issue dates which vary. For example, some monthly billers may have a billing period which extends from the fifteenth of one month to the fifteenth of the next month, while other billers may have a monthly billing period which extends from the last day of one month to the last day of the following month. Further, even if different billers bill charges incurred over identical periods, the issue dates of the bills can vary widely. Accordingly, payors typically receive bills at various times throughout, for example, any given calendar month.

[0005] To complete the billing process individual payors have historically made payments directly to each individual biller by hardcopy paper check drawn against a financial institution and mailed via the postal service to the biller's remittance center. A returnable portion of the billing information received from the biller is typically returned with the check. The biller must then present the check for payment through the payor's financial institution before the payment funds can be actually received by the biller and applied against the payors account.

[0006] Systems have been implemented to allow payors to pay bills electronically. For example, U.S. Pat. No. 5,383,113 which is assigned to the assignee of the present application, discloses a system for electronic payment of bills received by individual payors from various billers. Recent improvements have been made in electronic bill payment systems, such as those disclosed in U.S. patent application Ser. No. _____ (Attorney docket no. 33500-00001) entitled An Electronic Bill Payment System with Merchant Identification, filed on Dec. 19, 1997 and U.S. patent application Ser. No. 09/010,193, entitled Dual Source Remittance Processing, filed on Jan. 21, 1998, both of which are also assigned to the assignee of the present application and are incorporated herein by reference. Such systems allow the payor, using a home or office computing device, e.g. a personal computer, to access a centralized payment station, e.g. a server, via a network. Based upon the payor's authorization, the centralized station can access funds in the payor's checking account at a financial institution to pay various billers in accordance with payment instructions received from the payor via the network. The payments may be made either by electronic funds transfer or by hardcopy paper check to the individual billers.

[0007] Although advances in electronic bill payment systems have significantly automated remittance processing, these systems have not eliminated the need for payors to continue to receive large numbers of hardcopy paper bills from individual billers. Hence, bill presentment has remained a tedious and expensive task both in terms of the preparation and the distribution of billing information.

[0008] Recently, a centralized bill presentation system has been proposed. As proposed, billing information is forwarded to a centralized system by multiple billers. The received billing information is accumulated over some prespecified period of time corresponding to a billing cycle and then forwarded in a single transmission to the applicable payors. Although the proposed system could result in some reduction in the cost of distributing bills, it has numerous disadvantages.

[0009] For example, since the proposed system transmits billing information to an individual payor only after bills from different billers have been accumulated over a predefined period of time, such as a calendar month, bills which have been issued early in the cycle may be received too late to avoid charges for late payment. Further, since billing information is only made available after the completion of a full billing cycle, even if a particular payor would prefer to review and pay bills on an ongoing basis throughout the billing cycle, the payor must wait until after the end of the cycle to receive a single batch of bills. The payor will therefore need to allocate a large block of time after receipt of the transmitted accumulated billing information to review and pay the associated bills. Hence, the proposed system is inflexible in dealing with individual payor demands. Although the proposed system may electronically transmit the accumulated billing information to the payors, because all information is sent in a single transmission significant communications network resources will be required for each transmission if detailed billing information is to be provided to each payor.

OBJECTIVES OF THE INVENTION

[0010] Accordingly, it is an object of the present invention to provide a technique for electronically presenting billing information in a manner which facilitates the timely payment of bills by payors.

[0011] It is another object of the present invention to provide a technique for electronically presenting billing information from different billers when desired by the payor.

[0012] It is a further object of the present invention to provide a technique for electronically presenting bills in a form desired by a payor.

[0013] Additional objects, advantages, novel features of the present invention will become apparent to those skilled in the art from this disclosure, including the following detailed description, as well as by practice of the invention. While the invention is described below with reference to a preferred embodiment(s), it should be understood that the invention is not limited thereto. Those of ordinary skill in the art having access to the teachings herein will recognize additional implementations, modifications, and embodiments, as well as other fields of use, which are within the scope of the invention as disclosed and claimed herein and with respect to which the invention could be of significant utility.

SUMMARY DISCLOSURE OF THE INVENTION

[0014] In accordance with the invention, an electronic bill presentment system includes a memory, such as an electrical or optical storage device, a processor, such as a high speed microprocessor, and a communications network interface. The system may take the form of one or more servers interconnected to a private or public bill presentation network, e.g. the Internet.

[0015] The memory stores billing information, associated with various billers, representing bills for various payors. Preferably the billing information is received from the billers or their representatives, e.g. bill consolidators, via the network interface and is stored on the memory by the processor in association with an identifier of the appropriate payor.

[0016] In a typical operational sequence, the processor accesses the memory to read the stored billing information. Using this information, the processor generates bill presentment information which corresponds to a portion of the billing information which represents bills for a first payor. The processor also generates bill presentment information which corresponds to other portions of the billing information which represents bills for other payors. The bill presentment information may relate to paid bills, unpaid bills or bills having another desired status, or any combination thereof. The bill presentment information, may be a detailed bill which includes all the applicable billing information, could be a summary of the applicable billing information, or could be a simple retransmission of all or some of the applicable billing information. Some or all of the bill presentment information may also be stored in the memory.

[0017] Preferably, the bill presentment information includes a summary listing of all bills of a desired status, such as all paid or unpaid bills. Beneficially, the bill presentment information includes a listing of respective billed amounts owed by the payor to a number of the different billers, which can be presented as one or more pages on a display, such as the monitor of a payor's home or office computer. The bill presentation information could also include a formatted version of all the applicable billing information, such as a full detailed presentation of a bill, which can be presented on a display so as to appear substantially similar to the conventional hardcopy bills which are regularly received by mail today.

[0018] The processor generates signals directing transmission of the applicable bill presentment information responsive to requests for current billing information, received by the network interface, from respective payors. The network interface transmits the applicable bill presentment information to the appropriate payor responsive to the applicable signal.

[0019] Preferably, the processor generates a notice of availability of current billing information to each of the payors for whom billing information has been received by the system and stored in the memory. In this regard, the processor generates a signal directing the transmission of each notice, responsive to which the network interface transmits a respective notice to the appropriate payor. Each notice may be an e-mail message addressed to the network e-mail address, e.g. an Internet e-mail address, of the appropriate payor.

[0020] According to other aspects of the invention, the processor may also generate a further notice of availability of current billing information and a signal directing the transmission of this further notice to a payor after some period of time has passed subsequent to the applicable billing information having been first noticed to or requested by the payor. For example a further notice may be generated if no request for bill presentment information is received for some period of time after a first notice of availability has been transmitted. An additional notice may also or alternatively be generated if no notice of payment of some or all of the bills represented the applicable portion of the billing information has been received by the system for some period of time after bill presentment information has been requested by a payor, transmitted to a payor or viewed by a payor. The network interface transmits this further notice to the applicable payor responsive to the signal.

[0021] According to further aspects of the invention, the processor may continuously update the bill presentation information based upon the new bill related information, such as additionally received billing information representing new bills to be paid or the payment of bills which were represented by billing information previously received by the applicable payor. In this regard, the processor, if desired, can generate new bill presentment information corresponding to some or all of the portion of the old billing information which represents bills for a particular payor, e.g. that which represents only those bills which have been paid or remain unpaid, and the portion of the new billing information which represents bills for the same payor, e.g. newly paid bills or new outstanding bills. If, for example all the bills represented by the applicable portion of the old billing information have been paid, the new bill presentment information would only include the applicable portion of the new billing information. This new billing information may be associated with the same and/or different billers as the previously received billing information, but would more typically relate to different billers. The processor also generates a signal directing the transmission, via the network interface, of the new bill presentment information to the applicable payor responsive to the payor's request for the then current billing information.

[0022] In accordance with a further embodiment of the invention, an electronic bill presentment network is provided. The electronic bill presentment network includes a

private or public communications network, such as the Internet, interconnecting multiple biller stations, multiple client stations and a network server.

[0023] The biller stations each transmit the billing information associated with a respective one of the different billers to the server via the network. The network server receives and stores the transmitted billing information. The received information is stored such that the portion of the billing information representing bills for a particular payor is associated with that payor. Using a client station a payor can transmit, via the network, a request for current billing information. The network server receives each payor request and transmits bill presentment information, which corresponds to an appropriate portion of the billing information, to the applicable payor client station via the network responsive to the request.

[0024] As discussed above, if desired, the network server can transmit a notice of availability of current billing information to payors via the network. The client stations may transmit, subsequent to the transmission of a first request for current billing information, one or more additional request for then current billing information via the network. Hence, applicable current bill presentation information will be provided on-demand to the payor.

[0025] Beneficially, the network server receives notification of the payment of bills represented by the respective portion of the billing information applicable to each payor. In such a case, the network server only transmits or retransmits that part of the applicable bill presentment information which corresponds to the portion of the billing information representing the remaining unpaid bills via the network responsive to a payor request for information regarding outstanding bills which is received by the network server after receipt of the notice of payment.

BRIEF DESCRIPTION OF DRAWINGS

[0026] **FIG. 1** depicts a bill processing network in accordance with the present invention.

[0027] **FIG. 2** depicts a functional block diagram of the bill processing network of **FIG. 1**.

[0028] **FIG. 2A** depicts a simplified block diagram of the CF station of **FIG. 1**.

[0029] **FIG. 2B** depicts a simplified block diagram of an exemplary payor station of **FIG. 1**.

[0030] **FIG. 3** depicts various types of payor stations which can be utilized in the bill processing network of **FIG. 1**.

[0031] **FIG. 4** depicts a payor enrollment screen in accordance with the present invention.

[0032] **FIG. 5** depicts another payor enrollment screen in accordance with the present invention.

[0033] **FIG. 6** depicts a still further payor enrollment screen in accordance with the present invention.

[0034] **FIG. 7** depicts a simplified flow diagram of the operation of the bill processing network depicted in **FIG. 1**.

[0035] **FIG. 8** depicts a payor welcome screen in accordance with the present invention.

[0036] **FIG. 9A** depicts bill presentment information which includes a new bill summary screen in accordance with the present invention.

[0037] **FIG. 9B** depicts bill presentment information which includes an unpaid bill summary screen in accordance with the present invention.

[0038] **FIG. 9C** depicts bill presentment information which includes another type of bill summary in accordance with the present invention.

[0039] **FIG. 10A** depicts a pre-bill payment authorization screen in accordance with the present invention.

[0040] **FIG. 10B** depicts another pre-bill payment authorization screen in accordance with the present invention.

[0041] **FIG. 11** depicts bill presentment information which includes a detailed bill screen in accordance with the present invention.

[0042] **FIG. 12A** depicts a bill payment authorization screen in accordance with the present invention.

[0043] **FIG. 12B** depicts a different bill payment authorization screen in accordance with the present invention.

[0044] **FIG. 12C** details certain aspects of the bill payment authorization screen of **FIG. 12B**.

[0045] **FIG. 13** depicts bill presentment information which includes a listing of information related to bills which have been authorized for payment in accordance with the present invention.

[0046] **FIG. 14** depicts a biller category screen in accordance with the present invention.

[0047] **FIG. 15** depicts a screen having bill presentment and payment authorization information in accordance with the present invention.

BEST FOR CARRYING OUT THE INVENTION

[0048] **FIG. 1** depicts a communications network **100**, which can be a private or public network such as a wide area network (WAN), the Internet or some other type of communication network for linking biller stations **110***a*-**110***d*, payor stations **120***a*-**120***d*, financial institution (FI) stations **130***a*-**130***c* and a centralized CF station **140**. The biller stations **110***a*-**110***d* may represent individual merchants, utility companies, service providers, bank credit card companies, or other individuals or entities to whom a payment is owed. Payor stations **120***a*-**120***d* may represent individuals or entities which have purchased or ordered goods or services or otherwise have an outstanding debt to the billers represented by stations **110***a*-**110***d*. The payors represented by stations **120***a*-**120***d* maintain accounts with one or more of the financial institutions, which may, for example, be banks, credit unions or other type of financial institution or any combination. Each of the billers represented by stations **110***a*-**110***d* may also maintain one or more deposit accounts in the financial institutions represented by stations **130***a*-**130***c*. The CF station **140** serves as a centralized bill processing system as will be described in detail below.

[0049] **FIG. 2** is a functional block diagram of the bill processing network depicted in **FIG. 1**. As shown in **FIG. 2**, the CF station **140** is interconnected, via the network **100**, with each of the biller stations **110***a*-**110***d* and each of the

payor stations **120***a*-**120***d*. Accordingly, each of the billers represented by stations **110***a*-**110***d* can transmit, via the network **100**, billing information to each of the payors represented by stations **120***a*-**120***d* as appropriate through the CF station **140**.

[**0050**] As shown in **FIG. 2**A, the CF station **140** includes a network interface (NI) **405** for receiving and transmitting communications via the network **100**. The station **140** also includes a processor **410** and a memory **420**. The station **140** could, for example, be a high powered work station, mini-computer, mainframe computer or other type of network computing device which serves as a network servers or any combination of such devices. The memory **420** stores, in area **420***a*, biller data such as the biller's name, remittance center address, deposit account number with one of the financial institutions represented by stations **130***a*-**130***c*, account numbers for respective payors represented by stations **120***a*-**120***d*, network address, e.g. an e-mail address, and other biller related information of each of the billers represented by stations **110***a*-**110***d*. Payor data is stored in memory area **420***b* and will typically include such information as the payor's name and address, account numbers with respective billers represented by stations **110***a*-**110***d*, checking account number with one of the financial institutions **130***a*-**130***c*, network address, e.g. an e-mail address, and other payor related information.

[**0051**] The billing information received by the CF station **140** from the respective billers represented by stations **110***a*-**110***d* via the network **100** is normalized by the server processor **410** in accordance with the bill presentment software stored in memory area **420***c*. Different portions of the normalized bill information are stored in memory area **420***d* in association with a respective identifier of the appropriate payor represented by station **120***a*-**120***d* to whom that portion of the billing information relates.

[**0052**] The bill presentment software also generates a summary of the received billing information from each of the billers represented by stations **110***a*-**110***d* for each of the payors represented by stations **120***a*-**120***d* and stores the summary information with an identifier of the applicable payor in the memory area **420***e*. Bill templates are stored in memory area **420***f*. The bill templates can be merged with the normalized billing information to electronically present the billing information to the appropriate payor represented by station **120***a*-**120***d* in substantially the same form, including detailed billing information, biller logo, color and terms and conditions, as has historically been provided to the payor in hardcopy. Network software is stored in area **420***g* of the memory **420**.

[**0053**] Once the billing information has been processed by the processor **410** so as to be available for access by the appropriate payors, the processor **410** in accordance with the bill presentment software instructions stored in memory area **420***c*, generates an e-mail or other message to notify the applicable payors represented by station **120***a*-**120***d* of the availability of bill presentment information. The processor **410** also generates a signal directing the transmission of the message, via the network interface **405**, to the applicable payors using a network address, e.g. an e-mail address, stored as part of the payor data in area **420***a* of the memory **420**.

[**0054**] As shown in **FIG. 3**, the payor **120***a*-**120***d* may be represented by a personal computer (PC) **310** interconnected to the network **100** by a modem, a television (TV) **320** interconnected to the network **100** via a set top box, a touch tone telephone **330**, a mobile phone **340**, a notebook computer **350** interconnected to the network **100** by a modem, or some other network device. It will recognized by those skilled in the art that the network device could be of virtually any type capable of receiving a voice, graphic, or textual message. If different types of payor station devices are utilized, the payor data will include an identification of the particular type of network device being utilized by the payor. If audio devices such as telephone **330** or mobile phone **340** are utilized, the processor **410** is configured to include a voice synthesizer to generate voice messages and a voice signal converter to transform received audio messages into digital signals of processing at station **140** in accordance with the bill presentment software instruction stored in memory area **420***c*.

[**0055**] Referring now to **FIG. 2**B, an exemplary payor station **120** capable of receiving e-mail messages will now be described. Station **120** includes a payor processor **450** which is interconnected to a memory device **470**. The memory stores the payor client software in area **470***a* and the network software in area **470***b* of the memory **470**. It will however be recognized that, if desired, the memory **470** could be eliminated in and that storage of the payor client software could be implemented on the memory **420** of the CF station **140**. A network interface (NI) **455** interconnects the payor station **120** to the network **100**. Messages transmitted by the CF station **140** to the payor station **120** are received via the network interface **455** and processed by the processor **450** in accordance with the network software stored in area **470***b* of memory **470**.

[**0056**] In a customary e-mail notification processing sequence, the processor **450**, in accordance with the network software instructions stored in memory area **470***b*, directs the presentation of an indicator on the display **460** of the payor station **120** to notify the applicable payor that an e-mail message has been received. Using the input device **465**, which may be a keyboard, mouse or other input device, the applicable payor can access the e-mail message and request the available billing related information from the CF station **140**.

[**0057**] The notification mechanism may alternatively be implemented directly in the bill presentment client rather than via e-mail. Those of ordinary skill in the art will recognize that there may be many possible implementations of a notification mechanism.

[**0058**] The payor may request the available billing related information by, for example, inputting one or more commands on the input device **465**. Responsive to these commands, the processor **450** generates and directs the transmission of the request, via the network interface **455**, to the CF station **140**. The generated request could, for example, take the form of a reply e-mail message, an instruction to access a web page at the CF station **140** if the network is the Internet or some other instruction as will be well understood by those skilled in the art. If desired, the e-mail message could include an icon or other indicator which can be activated using the input device **465** to automatically link the payor station **120** to the CF station **140** to access bill related information.

[**0059**] Referring again to **FIGS. 2 and 2**A, the processor **410** of the CF station **140**, in response to the request received

from the payor station **120***a*-**120***d*, directs the transmission of the requested bill presentment information, via the network interface **405**, to the applicable payor station **120***a*-**120***d*. The transmitted bill presentment information may need to be generated by the processor **410** responsive to the payor request or may be already stored in the memory **420**. For example, the processor **410** may either retrieve the applicable template(s) and normalized billing information from memory areas **420***f* and **420***d* and merge this information to generate requested detailed bill presentment information. On the other hand, the processor may simply retrieve information stored in area **420***e* of memory **420** if only bill summary information is requested. It should be noted that by storing unmerged templates and normalized data and merging this information only responsive to request for detailed information, the required memory to store detailed bill presentment information can be significantly reduced. It should be understood that, in many cases, the payor will required only summary bill presentment information, and thus on-line processing to merge the templates and normalized billing information will not, in many cases, be required. However, preferably, detailed bill presentment information dynamically generated by merging template and normalized data may be cached to support re-retrieval requests responsively.

[**0060**] Referring again to **FIG. 2**B, the payor station **120***a*-**120***d* receives, via network interface **455** of payor station **120**, the bill presentment information transmitted by the CF station **140** over the network **100**. The payor processor **450** processes the received information in accordance with the payor client software stored in memory area **470***a* and directs the presentation of the received bill presentment information on the display **460** of the payor station **120**.

[**0061**] As discussed above referring to **FIG. 2**, the CF station **140** is linked via the network **100** to various financial institution stations **130***a*-**130***c* which represent financial institutions with whom checking accounts are maintained by one or more of the payors represented by stations **120***a*-**120***d* and/or deposit accounts are maintained by one of more of the billers represented by stations **110***a*-**110***d*. A payor, having received bill presentment information, can now request that payment of one or more bills be made to the appropriate biller(s) represented by station(s) **110***a*-**110***d*.

[**0062**] In this regard referring again to **FIG. 2**B, the payor processor **450** generates, in accordance with the client software residing in memory area **470***a*, a payment instruction and an instruction directing the transmission of the instruction, via the network interface **455**, over the network **100** to the CF station **140**. Referring again to **FIG. 2**A, the payment instruction is received and processed by the processor **410** of CF station **140**. The processor **410**, responsive to the received payment instruction and in accordance with the bill payment software stored in memory area **420***c*, directs the payment of the applicable bills either by electronic funds transfer or by hardcopy check.

[**0063**] If the payment will be made by electronic funds transfer, the CF processor **410** generates an electronic funds transfer instruction to electronically transfer the appropriate amount from the applicable payor's checking account maintained at one of the financial institutions represented by stations **130***a*-**130***c* to the appropriate biller's deposit account maintained at one of the financial institutions represented by stations **130***a*-**130***c*. The processor **410** also generates an instruction to transmit the electronic funds transfer instruction, via the network interface **405**, over the network **100** to the applicable payor financial institution station **130***a*-**130***c* and/or an originating financial institution and or originating financial institution to the Automated Clearing House (ACH) network or similar financial network for funds transfer.

[**0064**] The processor **410** also generates, in accordance with the bill payment software instructions stored in memory area **420***c*, a message indicating the amount of payment remitted and the associated payer account number, along with an instruction to transmit the message, via the network interface **405**, over the network **100** to the appropriate biller station **110***a*-**110***d*. This remittance advice information may flow directly to the biller station **110***a*-**110***d* or be routed with the payment through the biller's financial institution **130***a*-**130***c*, which would deliver the information to the biller station. It should be recognized that the biller station to which the payment notice is transmitted may be different than the biller station from which the billing information is transmitted.

[**0065**] If the payment will be made by hardcopy check, the CF processor **410** generates an instruction to print a hardcopy check for the appropriate amount against funds in CF station **140**'s checking account. The applicable payor's checking account maintained at one of the financial institutions represented by stations **130***a*-**130***c* is debited appropriately via ACH (resulting in electronic funds transfer to the CF station account) or via some form of "good funds" debiting through a direct electronic connection to the financial institution (resulting in electronic or wire funds transfer to the CF station account). The check may be a "single check" remitting only a single payor's payment to a particular biller, or a "check and list", combining the remittance from multiple payers to a particular biller. Alternatively, the CF processor may generate an instruction to print a hardcopy check for the appropriate amount against funds in the applicable payor's checking account maintained at one of the financial institutions represented by stations **130***a*-**130***c*. The processor **410** also generates, in accordance with the bill payment software instructions stored in memory area **420***c*, a message indicating the amount of the payment(s) remitted and the associated payor account(s). The printed message and check are then mailed to the applicable biller remittance center. It should be recognized that the location to which the payment notice is sent may be different than the location of the biller station from which the billing information is transmitted.

[**0066**] Referring again to **FIG. 2**, rather than having all operations performed by the CF station **140**, certain operations can be performed directly by other network stations and certain information can be transmitted directly between the payor stations **120***a*-**120***d*, the biller stations **110***a*-**110***d* and the financial institution stations **130***a*-**130***c*. It may, in some instances, be preferred to have the CF station **140** linked to the payor stations **120***a*-**120***d* and biller stations **110***a*-**110***d* via the financial institution stations **130***a*-**130***c*.

[**0067**] For example, it may be desirable in some cases for the biller stations **110***a*-**110***d* to communicate some or all bill related information via the network **100** directly to the payor stations **120***a*-**120***d* while the notices of the availability are

generated and transmitted by the CF station **140** directly to the appropriate payor stations. This facilitates biller control over bill related information which could be stored exclusively on a memory device at the appropriate biller station. In other cases, it may be advantageous for all payment instructions to be transmitted directly from the payor stations **120***a*-**120***d* to an appropriate financial institution station **130***a*-**130***c*. In such cases, there could be a preference to have the payment instruction processed by the CF station **140** or at the financial institution station **130***a*-**130***c*. In still other cases, it may be beneficial for all communications to be transmitted through the financial institution station **130***a*-**130***c* but all processing to be performed by the CF station **140**.

[**0068**] As indicated above, if desired, all or part of the billing information may be retained at the biller stations **110***a*-**110***d*. For example, it may be desired that detailed bill presentment information be retained at the biller stations **110***a*-**110***d* while summary bill presentment information be stored and provided by the CF station **140**. Although billing information may be maintained by the biller stations **110***a*-**110***d*, the request for such information may be directed through the CF station **140** to the appropriate biller **110***a*-**110***d* in order to provide a third party audit trail or meet other desired objectives.

[**0069**] Referring again to **FIGS. 2 and 2**A, the CF processor **410**, in accordance with the bill presentment software stored in area **420***c* of the memory **420**, preferably tracks and stores information relating to requests or transmissions of bill presentation information to payors after the notice of availability. The CF processor **410** also preferably receives, stores and tracks a signal from the payor stations **120***a*-**120***d* relating to when a notice of availability bills has been viewed by the applicable payor. In this way, the processor **410**, in accordance with the bill presentation software instructions, may transmit a reminder notice of the availability of bills, for example, if no request to view the bills has been received for some period of time after the payor has viewed the notice or if bills represented in previously requested bill presentment remain due and unpaid after some period of time. It may be desirable to send reminder notifications one or more times at fixed intervals, e.g., weekly, after the initial viewing of the notice of availability or the initial request for bill presentment information. A reminder notice could alternatively or additionally be sent just prior to the bill due date as a final reminder to the payor before late payment or interest charges will accrue.

[**0070**] Turning now to FIGS. **4-6**, the payor enrollment process performed by the CF processor **410**, in accordance with the bill presentment and bill payment software instructions stored in memory area **420***c*, will be described. Upon request by an existing or potential payor represented by a payor station **120***a*-**120***d*, enrollment interface information is electronically transmitted via the network **100** from the CF station **140** to the applicable station **120***a*-**120***d*. The information is provided so as to be capable of processing by the payor processor **450** and presented in one or more screens on a display **460** of the payor station **120**. It will of course be recognized that, although the enrollment process is described with reference to a payor station of the type shown in **FIG. 2**B, the process could be easily implemented with other types of payor stations.

[**0071**] The initial enrollment screen **550**, as shown in **FIG. 4**, includes a listing in block **560** of billers from whom bills can be received electronically. An indicator **565** indicates those billers whose bills can be received electronically and who can also be paid electronically as previously described. The payor using the input device **465** of the payor station **120** can select any or all of the billers identified in the listing in block **560** for electronic bill presentation and/or electronic payment, if applicable. The account number for the payor's account with each selected biller is inserted in block **562** using the payor input device **465**. The payor is also given the option, in block **570**, of identifying other billers not included in the listing in block **560**. Since all billers from whom electronic bills are available are listed in block **560**, block **570** is reserved for those billers, for example, the paper boy, babysitter, lawn boy, etc., to whom the payor desires to make payments electronically through the CF station **140** based upon hardcopy bills received directly from the biller.

[**0072**] **FIG. 5** depicts further enrollment screen **500** transmitted by the CF station **140** to the payor station **120***a*-**120***d* during the enrollment process. This screen is also presentable on the display **460** of the payor station **120**. This screen facilitates the gathering of payor data which is necessary or desirable for the processing of bills. Using the input device **465** of the payor station **120**, the payor enters his/her first name, middle initial, and last name in block **510** of the screen **500**. The payor is also requested to enter his/her social security number in block **520** and mother's maiden name in block **525**. The maiden name of the payor's mother is requested for subsequent verification purposes. The payor's address is also requested to be entered in block **530**. In blocks **540**, both home and office telephone numbers are requested.

[**0073**] It should be noted that although the payor's account numbers for those billers selected from the listing in block **560** of **FIG. 4** are requested, in certain implementation it may be preferable to obtain the account numbers from the billers as part of the information to be forwarded to the CF station **140** by the applicable billers selected in block **560** of **FIG. 4**. By eliminating the need for potential payors to provide an account number, the enrollment process can be simplified somewhat from the enrollee's prospective. However, it should be noted that in most cases it will be beneficial to request that the payor enter an account number for each selected biller.

[**0074**] Turning now to **FIG. 6**, another screen **600**, transmitted from the CF station **140** to the payor station **120** during the enrollment process, depicts an exemplary portion of a conventional personal check in block **610**. Within this block, the areas of the check having the routing and transit number (RTN) and the account number are indicated. The RTN and account number for the applicable payor's checking account with the applicable financial institution **130***a*-**130***c* are entered in block **620**. Additionally, in block **630**, log on information is entered in the form of a user name and password to complete the enrollment process.

[**0075**] Upon enrollment, the billers from whom electronic bills have been requested and the financial institutions from whom checking account withdrawals have been authorized are notified, supplied information is verified and additional information is requested.

[0076] **FIG. 7** provides a simplified flow diagram which summarizes operations of the CF station **140** during bill processing. It should be noted that the operations are described with the CF station **140** serving a centralized role within the bill processing network of **FIGS. 1 and 2**. Those skilled in the art will understand that the described operations could be performed as appropriate by stations other than the CF station **140** within the network shown in **FIGS. 1 and 2**, as has been previously described above.

[0077] As indicated in step **705**, the CF station **140** receives billing information from the biller stations **110***a*-**110***d* via the network **100**. The received billing information is normalized, summarized and stored in steps **710** and **715** at the CF station **140**. In step **720**, the payor is notified of the availability of bills by message transmitted from the CF station **140** to the payor station **120***a*-**120***d* via network **100**. In step **725**, the CF station **140** receives a request for bill presentation information from the applicable payor station **120***a*-**120***d*. The bill presentment information is transmitted over the network **100** by the CF station **140** to the applicable payor station **120***a*-**120***d* in step **730**, responsive to the request. The bill presentment information may include only a summary of bills or one or more detailed bills formed by templating the normalized data before transmission. If desired the transmitted bill presentment information could include both summary and detailed bills.

[0078] In step **740**, the CF station **140** determines if bill payment instructions have been received for those bills represented by the previously transmitted bill presentation information. This determination may, for example, be made at some predefined period after the receipt of a request for or transmission of the bill presentation information. If not, the payor is again notified of the bill availability in step **720**.

[0079] Optionally, the payor station **120***a*-**120***d* may be configured to transmit a notice to the CF station **140**, responsive to the viewing of the notice of availability by the applicable payor. In step **735**, the CF station **140** determines if a request to receive bill presentment information has been received for those bills represented by the previously transmitted notice of availability. This determination may, for example, be made at some predefined period after the initial viewing of the notice of availability of bill presentation information. If not, the payor is again notified of the bill availability in step **720**. If a request has been received, the process continues at step **730**.

[0080] If the determinations in step **740** is positive, in step **755**, the CF station **140** determines if, in accordance with the payment instruction, the bill is to be paid by electronic funds transfer. If yes, CF station **140** transmits, via the network **100**, an electronic funds transfer instruction to the payor's deposit account at one of the applicable financial institution represented by stations **130***a*-**130***c* in step **760**. The CF station **140** also transmits, via network **100**, a notice to the applicable biller station of the payment in step **765**. If payment is to be made by check, the CF station **140** generates a hardcopy check with the appropriate account information and directs the mailing of same to the biller in step **770**.

[0081] Referring now to FIGS. **8**-**15**, the payor, at his/her own prerogative, can access the bill presentment information at the CF station **140** via the network **100** at any time. For example, this contact may be initiated by using a payor station **120***a*-**120***d* to contact the CF station **140** at a Web site on the Internet.

[0082] Upon initiating contact with the CF station **140**, the payor is welcomed, as shown in **FIG. 8**, by a screen **800** transmitted by the CF station **140** to the payor station **120***a*-**120***d* for presentment on the payor station display **460**. The screen **800** includes notification of bills in block **810** and of messages in block **820** which have not been previously transmitted to the payor. In this particular instance, no new bills or messages are indicated. If new bills and/or messages are available, the payor can, using the payor station input device **465**, click on indicator **810***a* to access the new bills and indicator **820***a* to access the new messages.

[0083] From screen **800**, the payor can also access either bill presentment information related to previously transmitted billing information, including information relating to unpaid bills or paid bills, as well as information relating to previously accessed messages by clicking on indicator **830***a* to receive the unpaid bills, indicator **840***a* to access bill presentment information related to paid bills, and indicator **850***a* to access other messages. The payor can also select categories as indicated in block **870** by clicking on indicator **870***a*. Responsive to clicking on indicator **870***a*, the CF station **140** will transmit a screen which will be described below and allows the payor to categorize billers in any desired manner.

[0084] The payor can also contact customer care by inserting a topic of interest in block **860** and clicking on the indicator **860***a*. Alternatively, block **860** may offer a pull-down list of selectable topics, similar to block **560** in **FIG. 4**. In such a scenario, the payor would select one of the topics prior to clicking on indicator **860***a*. By clicking on the indicator **860***a*, a message is sent from the payor station **120***a*-**120***d* to the appropriate customer care station. The customer care station may be the CF station **140** for all topics, or could alternatively be the CF station **140** for certain topics, the appropriate financial institution station **130***a*-**130***c* for other topics and/or the appropriate biller station **110***a*-**110***d* for still other topics.

[0085] For example, if the inquiry topic relates to the accounting of certain funds transfer from the payor's checking account, the customer care request can be directed to the appropriate financial institution station **130***a*-**130***c*. If the indicated topic relates to a particular merchant billing, the customer care request can be directed to the appropriate merchant station **110***a*-**110***d*. If the inquiry is of a more general nature, the customer care request can be directed to the CF station **140**.

[0086] The customer case messaging option shown in **FIG. 8** and described here may be beneficially provided on some or all screens presented on the payor station **120***a*-**120***d*.

[0087] It will be understood by those skilled in the art that, if the CF station **140** serves as a centralized gateway for all communications, all customer care requests could be directed to the CF station **140** and it may be unnecessary for the payor to indicate a topic of interest in block **860**. Likewise, if all pertinent information is available at the CF station **140** then all customer care inquiries could also be directed to and disposed of by customer care represented by

the CF station **140** rather than being forwarded on to a financial institution station **130***a*-**130***c* or biller station **110***a*-**110***d* for response.

[**0088**] Referring now to **FIG. 9**A, as noted above, if new bills are available, a summary of these bills can be accessed by clicking on indicator **810***a*. Similarly, if new messages are available, these messages can be accessed by clicking on indicator **820***a*. By clicking on indicator **810***a* when new bills are indicated, a screen **900**, as shown in **FIG. 9**A, is transmitted from the CF station **140**, via the network **100**, to the payor station **120***a*-**120***d*, processed by payor processor **450** and presented on the payor display **460**. The screen **900** includes bill presentment information **910** which summarizes the new bills which have been received since the payor last requested bill presentment information related to unpaid bills. The summary information includes the biller name, amount of the new bill and the due date for payment of the bill.

[**0089**] As indicated in **FIG. 9**A, the applicable biller logo may be displayed as part of the presentation. The payor is given the option of clicking on a pay indicator **910***a*, a mark indicator **910***b*, or a delete indicator **910***c*, associated with each summarized billing. By clicking on the pay indicator using the payor input device **465**, a signal is transmitted to the CF station **140** to direct payment of a particular billed amount on the due date. By clicking on indicator **910***c*, the displayed bill presentation information relating to a particular biller is deleted. By clicking on indicator **910***b*, the bill summary information relating to one or more particular bills is marked and by then clicking on indicator **915** the detailed bill presentment information relating to these particular bills can be retrieved from the CF station **140**. The payor also has the option, using the payor input device **465**, of clicking on block **920** to access a summary of all unpaid bills from the CF station **140**. The unpaid bill summary will be substantially in the form of bill summary **910**, but will include a summary listing of all unpaid bills rather than just listing new unpaid bills.

[**0090**] **FIG. 9B** depicts screen **930** which can be transmitted from the CF station **140** to present summary bill related information at the payor station **120***a*-**12***d* in a categorized manner. As shown, by clicking on indicator **935**, categories of billers are changed in block **940**. For example, in screen **930** the category has been set to unpaid bills and accordingly, a summary of all unpaid bills appears on the payor display **460**. Other categories could be, for example, utility bills, paid bills, questioned bills, credit card bills or any other category which may be desirable under the particular circumstances. In screen **930**, one or more of the check blocks **945** can be clicked on along with the pay bill indicator **950** to direct a communication from the payor station **120***a*-**120***d* to the CF station **140** instructing particular bills which are summarized in screen **930** should be paid on the due date. Indicator **955** allows the check blocks **945** to be reset in the event that a block is inadvertently checked.

[**0091**] **FIG. 9C** depicts still another screen **960** which can be transmitted from the CF station **140** to the appropriate payor station **120***a*-**120***d* for presentation on the payor display **460**. As shown, the listing contains a current bill summary with payee names **965**, total bill amounts **970**, minimum payment amounts due **975**, payment due dates **980** and bill status **985**. Indicators **990** indicate that a pre-bill payment authorization has been made with respect to particular bills. Such authorizations will be described below. The status may, for example, be indicated as unpaid, as being processed if payment has been previously directed by the payor, or as on hold if the bill has been previously questioned by the payor.

[**0092**] As indicated in block **992**, the payor can direct that all bills summarized in the bill summary of **FIG. 9C** be paid by clicking on the indicator **992***a*. Clicking on indicator **992***a* will result in the payor processor **450** directing a communication to the CF station **140** to pay all of the listed bills by the due date. Alternatively, as indicated in block **994**, the payor can click on the indicator **994***a* to direct payment of the minimum amount due on all listed bills be paid by the payment due date. To the extent that the payment of bills have been preauthorized by the payor, clicking on indicator **992***a* or **994***a* will not affect the pre-authorized payments.

[**0093**] Block **996** identifies the category of billers with respect to whom bill related information is summarized in screen **960**. An indicator arrow **996***a* can be clicked on to scroll through various categories of billers to change the information summarized on screen **960**, as has been previously described with reference to **FIG. 9B**. Additionally, dates can be inserted in block **998** to limit or extend the amount of bill summary information which is displayed. The arrow indicator **998***a* can be used to change the "TO" date.

[**0094**] By clicking on one or more indicators **965***a* and the retrieve indicator **999**, detailed bill presentment information relating to particular bill summary items can be accessed from the CF station. By clicking on one or more of the indicators **970***a* and the pay indicator **997**, an instruction to pay the total billed amount associated with particular bills will be communicated to the CF station **140**. By clicking on one or more of the indicators **975***a* and the pay indicator **997**, an instruction will issue to the CF station **140** to make payment of the minimum amount due on particular bills.

[**0095**] Turning now to **FIG. 10A, a** pre-bill payment authorization screen **1000** is shown. The screen is transmitted from the CF station **140** to the appropriate payor station **120***a*-**120***d* for presentation on the payor station display **460**. The pre-bill payment authorization screen **1000** allows the payor to identify billers in column **1005** whose bills are pre-authorized by the payor for payment by the CF station **140**. More particularly, the payor can designate in column **1010** a fixed payment amount, a maximum payment amount or an instruction to pay the total amount due or minimum amount due for any named biller. Further, the payor can specify, if so desired, in column **1015**, a frequency at which such payments are authorized.

[**0096**] As shown in **FIG. 10**A, the payor can also authorize payment of the total amount billed for all billers identified by an asterisk **415** in **FIG. 4** by filling in a period of authorization in block **1020** and clicking on indicator **1020***a*. Similarly, if the payor wishes to pre-authorize payments of the minimum amount due on all bills, the period of authorization can be inserted in block **1025** and indicator **1025***a* can be clicked on. As indicated by block **1030**, an indicator **1030***a* can be clicked on to direct that notification of and bill presentment information associated with bills for which payment is pre-authorized not be forwarded to the payor. The payor also has the option, as indicated by block **1035**, of clicking on indicator **1035***a* to receive notices and

presentations of bill presentment information associated with the bills which have been pre-authorized for payment by the CF station **140**.

[**0097**] **FIG. 10B** depicts an alternative screen **1050** which may be utilized in setting up pre-bill payment authorization. Screen **1050** is transmitted from the CF station **140** to the applicable payor station **120***a*-**120***d*. Billers identified in block **1060** and associated account numbers identified in block **1065** can be changed by clicking on indicator **1055**. Alternatively, the payor can enter a biller name in block **1060** and the payor's account number with the particular biller payments will appear automatically in block **1065**. By clicking on indicator **1070**, the payor can direct the CF station **140** not to transmit notices and presentations of bill presentment information relating to the particular biller indicated. By clicking designator **1075**, the payor can direct the CF station **140** to continue to transmit notices and bill presentment information regarding unpaid bills of the identified biller. By clicking on indicator **1080** after entering an amount in block **1085**, the payor can pre-authorize the CF station **140** to pay bills of the indicated biller up to the maximum amount indicated without further authorization.

[**0098**] As indicated above, the payor station **120***a*-**120***d* can also access the detailed bill related information stored at the CF station **140**. As shown in **FIG. 11**, detailed bill presentment information, identified with referenced numeral **1110**, is transmitted as screen **1100** by the CF station **140** responsive to a request for such information from the payor station **120***a*-**120***d*. By clicking on indicator **1120**, the payor station **120***a*-**120***d* will issue an instruction directing the payment of the bill through the CF station **140**. The bill can also be deleted from the screen by clicking on indicator **1125**.

[**0099**] Responsive to clicking on indicator **1120** at payor station **120***a*-**120***d*, a screen **1200**, as shown in **FIG. 12***a*, is transmitted by the CF station **140**. The screen **1200** includes a check **1205** which can be presented by the payor processor **450** on the display **460** at the payor station **120***a*-**120***d*. The check **1205**, as shown, resembles a conventional hardcopy personal check. The name of the applicable biller automatically appears in the block **1210**. An appropriate payment date automatically appears in block **1215**. It should be noted that the indicated payment date may pre-date the payment due date included on the bill presentment information of **FIG. 11** to reflect when the payment must be made to ensure timely arrival and avoidance of late charges. The lead time may vary depending on the remittance method (hardcopy check or various forms of electronic funds transfer). The total bill amount is also automatically indicated in block **1220**.

[**0100**] The payor can modify the date and amount of the payment if so desired. As an option, the payor can also indicate in block **1225** that the amount shown should be paid to the biller more than once, for example, monthly or semi-annually. This feature will typically be most useful where a fixed payment amount is payable on a fixed periodic basis to the applicable biller. The payor then clicks on the pay bill indicator **1230** to direct transmission of an instruction from the payor station **120***a*-**120***d* to the CF station to make payment to the designated payee, i.e., biller, in the designated amount on the designated date.

[**0101**] **FIG. 12B** depicts an alternative bill payment screen **1250**. Screen **1250** includes a check **1255** which is similar to check **1205** of **FIG. 12**A, but which can be used in connection with the payment of individual bills from a bill summary screen such as those previously described with reference to FIGS. **9**A-**9**A. More particularly, responsive to the pay indicator, in the bill summaries shown in FIGS. **9**A-**9**C, being clicked on at the payor station **120***a*-**120***d*, the CF station **140** transmits screen **1250** to the payee station. The check **1255** includes block **1260** in which an individual biller's name can be inserted by scrolling through billers names appearing on the bill summary using the arrow indicator **1260***a*. The bill due date or a date which allows time for hardcopy mailing of a check to the biller automatically appears in the date block **1265** for the listed bill of the selected biller.

[**0102**] In the screen **1250**, the block **1270** must be filled in by the payor to indicate the desired payment amount. Block **1275** can be scrolled by clicking on the arrow indicator **1275***a* to select the period of payment as has been previously discussed with reference to block **1225** in **FIG. 12A**. **FIG. 12C** further details screen **1250** to show that block **1275** can be expanded to provide multiple options with respect to the payment period for selection by the payor.

[**0103**] Once the check **1255** has been appropriately filled out the payor can then click on the pay bill indicator **1280** to transmit an instruction from the payor station **120***a*-**120***d* directing the CF station **140** to pay the selected biller in accordance with information contained in the filled check **1255**. If, on the other hand, changes in the check information are required, the payor can click on indicator **1285** to reset check **1255** and restart the process of selecting a biller for payment and filling in the amount of the payment to be made.

[**0104**] Referring to **FIG. 13, a** screen **1300**, having a payment list **1305** including those bills which have been paid or on which instructions for payment have been received, is generated by the CF station **140**. Responsive to a request from the payor, the screen **1300** is transmitted via the network **100** to the appropriate payor station **120***a*-**120***d*. The screen **1300** is presentable on the payor display **460**. The screen includes a listing of billers in column **1310** and a listing of the date on which payment has or will be made in column **1315**. The amount of the authorized payment is listed in column **1320** along with the period at which such payment is authorized in column **1325**. A payment confirmation number is referenced in column **1330**. This number can be used to identify the particular transmission or payment of interest should the payor wish to make any inquiries to customer care regarding the payment. In column **1335**, the status of the payment is indicated. For example, as indicated, the status may be that payment has been processed or may be pending awaiting a due date of payment. In column **1340**, the payor is provided with various options depending upon the status of the payment. For example, where payment is pending, the payment authorization can be stopped or edited. In those cases where payment has been made, the payor can make inquiries relating to those payments.

[**0105**] **FIG. 14** depicts a screen **1400** which, responsive to a request from a payor, is transmitted by the CF processor **140** to the payor station **120***a*-**120***d*. Screen **1400** allows the payor to establish certain categories of billers, as has been previously discussed. For example, the biller may, in block **1405**, establish categories for utilities, credit card compa-

nies, school, tennis related activities and any other categories as may be desired by an individual payor. By clicking on the reset indicator **1410**, the payor can modify the listed categories. The selected categories and any changes to the category listings are saved by clicking on indicator **1415**.

[**0106**] **FIG. 15** depicts a particularly beneficial screen **1500** for bill presentment and payment. As shown, the CF processor **140** transmits for presentation on the payor station display **460**, a screen having an area **1505**, which includes biller-specific bill presentment information, including the biller name, biller address and payor account number with the biller in block **1510**. The area **1505** also includes a block **1515** having the biller invoice number and invoice date to the extent applicable. A block **1520** presents information which includes the purchase dates, product/service descriptions and the associated billed amounts, along with the total amount due and minimum payment due. A block **1525** indicates the payment due date.

[**0107**] In section **1530** of screen **1500**, a check **1535** is shown which includes information similar to that of check **1205** which is described above with reference to **FIG. 12**A, with the exception that the check **1535** includes an invoice number in block **1540** and a click on indicator for approving the payment in block **1545**. As in **FIG. 12**A, the payment due date and the total payment amount can be modified. An area **1550** of the screen **1500**, has indicators which can be clicked on to access other information. As shown, indicator **1555***a* can be clicked on to access other terms and conditions as indicated in block **1555**, and indicator **1560***a* can be clicked on to access advertisements which the biller wishes to include with the bill presentment as indicated in block **1560**.

[**0108**] An indicator **1565***a* can be clicked on to access customer care as indicated in block **1565**. The customer care access can, if desired, be similar to that described with reference to **FIG. 8**. Any customer care inquiry will automatically reference the particular account number referred to in area **1505** of the screen **1500**, and may also reference the invoice number referred to in area **1505**. By clicking on indicator **1570***a*, the payor can determine if payment has already been made as indicated by block **1570**. If payment has been made, by clicking on indicator **1570***a* a canceled check stamp will appear on the check **1535** to indicate that the check has been cashed.

[**0109**] Accordingly, utilizing the screen **1500**, a payor can access all information on a single screen necessary to review detailed bill presentment information relating to any particular bill, make payment of that bill in a desired amount and access other information, such as terms and conditions and advertisements, which would normally be included in a hardcopy mailing of bill. The payor can also determine that payment of the bill has in fact been received by the applicable biller. Should the biller have questions regarding the bill or payment, by simply clicking on indicator **1565***a*, customer care can be accessed.

[**0110**] It will also be recognized by those skilled in the art that, while the invention has been described above in terms of one or more preferred embodiments, it is not limited thereto. Various features and aspects of the above described invention may be used individually or jointly. Further, although the invention has been described in the context of its implementation in a particular environment and for particular purposes, those skilled in the art will recognize that its usefulness is not limited thereto and that the present invention can be beneficially utilized in any number of environments and implementations. Accordingly, the claims set forth below should be construed in view of the full breath and spirit of the invention as disclosed herein.

1. A method of electronically presenting billing information, comprising the steps of:

receiving billing information associated with a plurality of different billers, a first portion of the billing information representing bills for a first payor and a second portion of the billing information representing bills for a second payor;

receiving a first request from the first payor for current billing information representing bills for the first payor and a second request from the second payor for current billing information representing bills for the second payor; and

transmitting first bill presentment information corresponding to the first portion of the billing information to the first payor responsive to the first request and second bill presentment information corresponding to the second portion of the billing information to the second payor responsive to the second request.

2. A method according to claim 1, further comprising the steps of:

transmitting a first notice to the first payor of the availability of the first bill presentment information and a second notice to the second payor of the availability of the second bill presentment information;

wherein the first request is received responsive to the first notice and the second request is received responsive to the second notice.

3. A method according to claim 2, wherein:

the first notice is included in a first e-mail transmission to the first payor; and

the second notice is included in a second e-mail transmission to the second payor.

4. A method according to claim 2, wherein:

the first e-mail and the second e-mail are transmitted via the Internet.

5. A method according to claim 1, further comprising the steps of:

transmitting a first notice to the first payor of the availability of the first bill presentment information, wherein the first request is received subsequent to the transmission of the first notice; and

transmitting, subsequent to the receipt of the first request, a second notice to the first payor of the availability of the first bill presentment information if the bills represented by the first portion of the billing information remain unpaid for a specified period of time after transmission of the first bill presentment information to the first payor.

6. A method according to claim 1, wherein the billing information is first billing information and the plurality of different billers is a plurality of different first billers, and further comprising the steps of:

receiving, subsequent to the receipt of the first billing information, second billing information associated with a plurality of different second billers, a first portion of the second billing information representing bills for the first payor;

receiving a third request from the first payor for then current billing information; and

transmitting third bill presentment information corresponding to the first portion of the first billing information and the first portion of the second billing information to the first payor responsive to the third request.

7. A method according to claim 6, wherein a second portion of the second billing information represents bills for the second payor, and further comprising the steps of:

receiving notice of payment of the bills represented by the second portion of the first billing information;

receiving, subsequent to receipt of the notice of payment, a fourth request from the second payor for then current billing information; and

transmitting fourth bill presentment information corresponding to the second portion of the second billing information to the second payor, without transmitting the the second bill presentment information, responsive to the third request.

8. A method according to claim 1, wherein the billing information is first billing information and the plurality of different billers is a plurality of different first billers, and further comprising the steps of:

receiving, subsequent to the receipt of the first billing information, second billing information associated with a plurality of different second billers, a first portion of the second billing information representing bills for the first payor;

receiving notice of payment of some of the bills represented by the first portion of the first billing information;

receiving, subsequent to receipt of the notice of payment, a third request from the first payor for then current billing information; and

transmitting the first bill presentment information, excluding that corresponding to the first portion of first billing information representing bills for which the notice of payment has been received, and third bill presentation information corresponding to the first portion of the second billing information to the first payor responsive to the third request.

9. A method according to claim 1, further comprising:

storing the first bill presentment information in association with an identifier of the first payor and the second bill presentment information in association with an identifier of the second payor; and

reading the first bill presentment information from storage responsive to the first request and the second bill presentment information from storage responsive to the second request;

wherein the first bill presentment information read from storage is transmitted to the first payor and the second bill presentment information read from storage is transmitted to the second payor.

10. A method according to claim 1, wherein:

the transmitted first bill presentment information includes a listing, displayable as single page, of respective billed amounts owed by the first payor to each of more than one of the plurality of the different billers; and

the transmitted second bill presentment information includes a listing, displayable as single page, of respective billed amounts owed by the second payor to each of more than one of the plurality of the different billers.

11. A method according to claim 1, wherein:

the transmitted first bill presentment information includes a listing, displayable as, single page, of respective billed amounts paid by the first payor to each of more than one of the plurality of the different billers; and

transmitted second bill presentment information includes a listing, displayable as single page, of respective billed amounts paid by the second payor to each of more than one of the plurality of the different billers.

12. A method according to claim 1, wherein:

the first portion of the billing information is associated with only one of the plurality of different billers; and

the second portion of the billing information is associated with only one of the plurality of different billers.

13. A method according to claim 1, wherein:

the billing information is detailed billing information; and

the first bill presentation information includes a summary of the first portion of the detailed billing information associated with at least two of the plurality of different billers; and

the second bill presentment information includes a summary of the second portion of the detailed billing information associated with at least two of the plurality of different billers.

14. A method according to claim 1, wherein the billing information is first billing information and the plurality of different billers is a plurality of different first billers, and further comprising the steps of:

receiving, subsequent to the receipt of the first billing information, second billing information associated with a plurality of different second billers, a first portion of the second billing information representing bills for the first payor;

transmitting, prior to the receipt of the second billing information, a first notice to the first payor of the availability of the first bill presentation information;

transmitting, subsequent to transmission of the first bill presentment information and the receipt of the second billing information, a second notice of the availability of the first bill presentment information and second bill presentment information corresponding to the second billing information;

receiving a third request from the first payor for then current billing information; and

transmitting the first and the second bill presentation information to the first payor responsive to the third request.

15. An electronic bill presentment system, comprising:

a memory configured to store billing information associated with a plurality of different billers, a first portion of the billing information representing bills for a first payor and a second portion of the billing information representing bills for a second payor;

a processor configured to generate first bill presentment information corresponding to the first portion of the billing information, second bill presentment information corresponding to the second portion of the billing information, a first signal directing transmission of the first bill presentment information responsive to a first request for current billing information, and a second signal directing transmission of the second bill presentment information responsive to a second request for current billing information; and

a network interface configured to receive the first request from the first payor and the second request from the second payor, and to transmit the first bill presentment information to the first payor responsive to the first signal and the second bill presentment information to the second payor responsive to the second signal.

16. A system according to claim 15, wherein:

the processor is further configured to generate a first notice of availability of current billing information, a second notice of availability of current billing information, a third signal directing the transmission of the first, notice of availability and a fourth signal direction the transmission of the second notice of availability; and

the network interface is further configured to transmit the first notice to the first payor responsive to the third signal and the second notice to the second payor responsive to the fourth signal.

17. A system according to claim 16, wherein:

the third signal includes a network e-mail address of the first payor and the fourth signal includes a network e-mail address of the second payor.

18. A system according to claim 17, wherein:

the network e-mail address is the Internet e-mail address.

19. A system according to claim 15, wherein:

the processor is further configured to generate a first notice of availability of current billing information and a third signal directing the transmission of the first notice of availability and a second notice of availability of current billing information and a fourth signal directing the transmission of the first notice of availability; and

the network interface is further configured to transmit the first notice to the first payor responsive to the third signal and the second notice to the first payor responsive to the fourth signal; and

the first request is received subsequent to the transmission of the first notice and the second notice is transmitted subsequent to the receipt of the of the first request.

20. A system according to claim 19, wherein:

the processor is configured to generate the second notice and the fourth signal only if the bills represented by the first portion of the billing information remain unpaid for a period of time after generation of the third signal.

21. A system according to claim 15, wherein:

the billing information is first billing information and the plurality of different billers is a plurality of different first billers;

the processor is further configured to:

direct the storage of the first billing information and the second billing information in the memory, and

generate third bill presentment information corresponding to at least a part of the first portion of the first billing information and a first portion of second billing information associated with a plurality of different second billers, the first portion of the second billing information representing bills for the first payor, and

generate a third signal directing the transmission of the third bill presentment information responsive to a third request for then current billing information; and

the network interface is further configured to:

receive the first billing information,

receive the second billing information,

receive the third request from the first payor, and

transmit the third bill presentation information the first payor responsive to the third signal.

22. A system according to claim 21, wherein:

a second portion of the second billing information represents bills for the second payor;

the processor is further configured to:

generate fourth bill presentment information corresponding to the second portion of the second billing information and excluding the second bill presentation information, and

generate a fourth signal directing transmission of the fourth bill presentment information, responsive to a fourth request for then current billing information.

the network interface is further configured to:

receive notice of payment of the bills represented by the second portion of the first billing information,

receive, subsequent to receipt of the notice of payment, the fourth request from the second payor, and

transmit the fourth bill presentment information to the second payor without transmitting the second bill presentment information, responsive to the fourth signal.

23. A system according to claim 15, wherein:

the billing information is first billing information and the plurality of different billers is a plurality of different first billers, wherein:

the processor is further configured to:

direct the storage in memory of the first billing information and second billing information associated with a plurality of different second billers, the first portion of the second billing information representing bills for the first payor, and

generate third bill presentment information corresponding to the first portion of the first billing information, excluding that representing bills for which notice of payment has been received, and the first portion of second billing information, and

generate a third signal directing the transmission of the third bill presentment information responsive to a third request for then current billing information; and

the network interface is further configured to:

receive, subsequent to the receipt of the first billing information, the second billing information,

receive the notice of payment of some of the bills represented by the first portion of the first billing information,

receive, subsequent to receipt of the notice of payment, the third request from the first payor, and

transmit the third bill presentment information, responsive to the third signal.

24. A system according to claim 15, wherein:

the processor is further configured to:

direct storage of the first bill presentment information in association with an identifier of the first payor and the second bill presentment information in association with an identifier of the second payor, and

read the first bill presentment information from storage responsive to the first request and the second bill presentment information from storage responsive to the second request;

the first signal directs the transmission of the first bill presentment information read from storage to the first payor and the second signal directs the second bill presentment information read from storage is transmitted to the second payor.

25. A system according to claim 15, wherein the processor is further configured to:

generate the first bill presentment information to include a listing, displayable as single page, of respective billed amounts owed by the first payor to each of more than one of the plurality of the different billers, and

generate the second bill presentment information to include a listing, displayable as single page, of respective billed amounts owed by the second payor to each of more than one of the plurality of the different billers.

26. A system according to claim 15, wherein the processor is further configured to:

generate the first bill presentment information to include a listing, displayable as single page, of respective billed amounts paid by the first payor to each of more than one of the plurality of the different billers; and

generate the second bill presentment information to include a listing, displayable as single page, of respective billed amounts paid by the second payor to each of more than one of the plurality of the different billers.

27. A system according to claim 15, wherein:

the first portion of the billing information is associated with only one of the plurality of different billers; and

the second portion of the billing information is associated with only one of the plurality of different billers.

28. A system according to claim 15, wherein:

the billing information is detailed billing information; and

the processor is further configured to generate the first bill presentation information to include a summary of the first portion of the detailed billing information associated with at least two of the plurality of different billers, and the second bill presentment information to include a summary of the second portion of the detailed billing information associated with at least two of the plurality of different billers.

29. A system according to claim 15, wherein:

the billing information is first billing information and the plurality of different billers is a plurality of different first billers;

the processor is further configured to:

generate third bill presentation information corresponding to a first portion of second billing information associated with a plurality of different second billers, the first portion of the second billing information representing bills for the first payor,

generate, prior to receipt of the second billing information, a first notice of the availability of the first bill presentation information and a third signal directing transmission of the first notice,

generate, subsequent to transmission of the first bill presentment information and the receipt of the second billing information, a second notice of the availability of the first bill presentment information and the third bill presentment information and a fourth signal directing transmission of the second notice, and

generating a fifth signal directing the transmission of the first and third bill presentment information responsive to a third request for current billing information responsive to a third request for then current billing information;

the network interface is further configured to:

receive the first billing information,

receive the second billing information subsequent to receipt of the first billing,

transmit, prior to the receipt of the second billing information, the first notice to the first payor responsive to the third signal,

transmit the second notice to the first payor responsive to the fourth signal,

receive, subsequent to transmission of the second notice, the third request from the first payor, and

transmit the first and the third bill presentation information to the first payor responsive to the fifth signal.

30. An electronic bill presentment network, comprising:

a communications network;

a plurality of biller stations each configured to transmit billing information associated with a respective one of a plurality of different billers via the network;

a network server configured to (i) receive the transmitted billing information, (ii) store the received billing information such that a first portion of the billing information representing bills for a first payor is associated with the first payor and a second portion of the billing information representing bills for a second payor is associated with the second payor;

a first client station configured to transmit, via the network, a first payor request for current billing information;

a second client station configured to transmit, via the network, a second payor request for current billing information;

wherein the network server is further configured to receive the first payor request and to transmit first bill presentment information corresponding to the first portion of the billing information via the network responsive to the first request, and to receive the second payor request and to transmit second bill presentment information and second bill presentment information corresponding to the second portion of the billing information via the network responsive to the second request.

31. A network according to claim 30, wherein:

the network station is further configured to transmit a first notice of availability of current billing information to the first payor via the network and a second notice of availability of current billing information to the second payor via the network subsequent to receipt of the billing information.

32. A system according to claim 30, wherein:

the communications network is the Internet.

33. A system according to claim 30, wherein:

the first client station is configured to transmit, subsequent to the transmission of the first payor request, a second payor request for then current billing information via the network; and

the network server is further configured to receive notification of the payment of some of the bills represented by the first portion of the billing information, to receive the second payor request after receipt of the notice of payment, and to transmit the first bill presentment information corresponding to the first portion of the billing information representing only the remaining unpaid bills via the network responsive to the second payor request.

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