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(71) Applicant: **PITNEY BOWES INC.**
Stamford, Connecticut 06926-0700 (US)

(72) Inventor: **Heiden, Richard W.**
Huntington, CT 06484 (US)

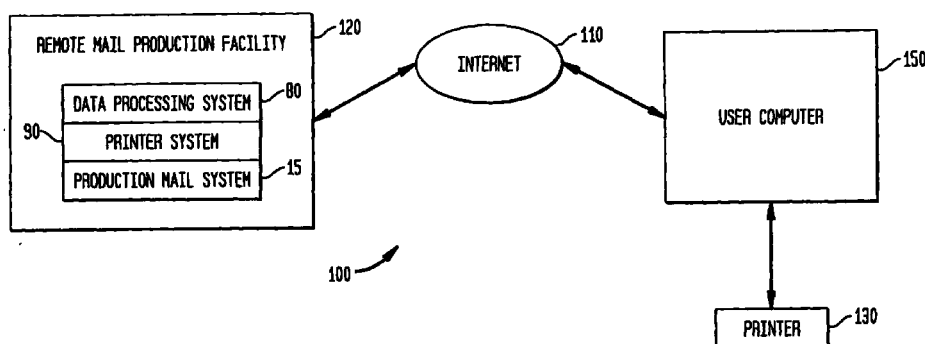
(74) Representative: **HOFFMANN - EITLE**
Patent- und Rechtsanwälte
Arabellastrasse 4
81925 München (DE)

(54) **System and method for subsidized printing of third party coupons for insertion into a specific mailpiece**

(57) A system and method is provided for printing an advertisement for insertion into a mailpiece. A customer computer system (150) communicates with a mailing service provider data processing system (80). The customer computer system (150) transmits to the mailing service provider data processing system (80) an electronic copy of at least one mailing address and at least one corresponding document to be mailed to the mailing address. The mailing address is cleansed as necessary by the mailing service provider data processing system (80), which then identifies a subset of third

party advertisements available for insertion into a mailpiece to be assembled with the corresponding document. Enclosures to be printed from the subset of third party advertisements are selected by the customer or automatically by mailing service provider data processing system based on advertisement profiles. The corresponding document and the selected enclosures are printed and then inserted into an envelope to form the assembled mailpiece.

FIG. 1



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Description

[0001] This invention relates generally to production mail systems, and is applicable to a production mail system including subsidies for printing of third party messages. The present invention also relates to a method of operating a remote mail production facility.

[0002] This application is related to the following co-pending applications filed concurrently herewith and commonly assigned to the assignee of this application: European Patent Application Serial No. (Applicant Docket No. E-803, Attorney Ref. 80 850), entitled POSTAGE PRINTING SYSTEM HAVING VARIABLE SUBSIDIES FOR PRINTING OF THIRD PARTY MESSAGES; European Patent Application Serial No. (Applicant Docket No. E-806, Attorney Ref. 80 851), entitled PRODUCTION MAIL SYSTEM HAVING SUBSIDIES FOR PRINTING OF THIRD PARTY MESSAGES ON MAILPIECES; European Patent Application Serial No. (Applicant Docket No. E-796, Attorney Ref. 80 838), entitled POSTAGE PRINTING SYSTEM HAVING SUBSIDIZED PRINTING OF THIRD PARTY MESSAGES; and European Patent Application Serial No. (Applicant Docket No. E-737, Attorney Ref. 80 839), entitled POSTAGE PRINTING SYSTEM HAVING A DIGITAL COUPON DISTRIBUTION SYSTEM.

[0003] Production mail systems, such as the Mail Center 2000™ mailpiece production system are well known. Generally, these systems are used by organizations (financial institutions, utility companies, insurance companies, etc.) that produce a large volume of mailings. The typical production mail system includes a data processing system, a printer system and an inserter system. The data processing system produces a plurality of documents intended for respective recipients. The printer system generates hard copies or printouts of the documents. The inserter system assembles the documents, folds the documents, stuffs the documents into envelopes to create a mailpiece and otherwise prepares the mailpieces for deposit with the postal authority for delivery.

[0004] Inserter systems capable of generating over 10,000 mailpieces per hour are well known in the art. Often times, the inputs to the inserter system are computer generated and the printed documents contain information that is intended for a particular addressee. Depending upon the type of printer system being employed, the documents may originate from a stack of cut sheets or from a web of forms. The inserter system accepts the documents and produces the individual mailpieces that correspond to each document. To accomplish this, the typical inserter includes a variety of modules for performing different tasks on the documents passing through the inserter, such as: various web handling modules (slitters, cutters and bursters) for separating the continuous forms into singular or discrete documents, a sheet feeder module for feeding individual cut sheets, an accumulator module for

assembling the sheets and/or form documents into a collation, a folder module for folding the collation into a desired configuration (Z-fold, C-fold, half fold), a conveyor/staging module for transporting and queuing the collation, a plurality of enclosure feeder modules for assembling and adding a packet of enclosures to the collation, an insert station module for inserting the collation into an envelope, and a control system to synchronize the operation of the overall inserter system to assure that the collations are properly assembled. Examples of such inserter systems are the 8 Series™ and 9 Series™ inserter systems available from Pitney Bowes Inc. of Stamford, Connecticut.

[0005] Typically, information for control of such inserter systems is read from a control document by a scanner associated with the most upstream module in the inserter system. The control document is generally an address-bearing document and contains information that is specific to a particular addressee. Additionally, each control document contains control information for instructing the downstream modules as to how to assemble a particular mailpiece. Once scanned, the control information is transmitted to the control system of the inserter system, which monitors the processing of the collation through each module. Generally, the control document includes a barcode type control code, or other machine readable symbology, that defines: the number of forms or sheets to be accumulated into the collation, the number of enclosures from each of the enclosure feeder modules to be assembled to the collation and information for other purposes such as the selection of appropriate postage. A more detailed description of inserter systems including bar code scanning may be found in U.S. Patent No. 5,008,520 and U.S. Patent No. 5,157,243.

[0006] It is also known to "top off" a mailpiece assembled by an inserter system by selecting optional enclosures that can be included in the mailpiece without exceeding the postage category weight limit for the mailpiece. A more detailed description of inserter systems including such topping off feature may be found in U.S. Patents Nos. 5,367,450, 4,829,443 and 4,821,493. Typically, such optional enclosures are in the form of advertising material, generally related to the originator of the mailpiece. However, it is known to subsidize the cost of a mail production run by including advertising enclosures from third parties.

[0007] Heretofore, this ad brokering system has generally been available only to mailers that operate the console inserter systems such as those previously noted. Typically, such mailers include large corporations, for example, banks, insurance companies, department stores, credit card companies and others involved in high volume mail production, as well as large mail houses that produce mail for moderate to high mail volume customers.

[0008] Recently, a new production mail service DirectNET™ Mailing Services from Pitney Bowes Inc. of

Stamford, Connecticut is available to small business owners. DirectNET is a remote mail production service, which is designed to print and mail out the letters, brochures, newsletters or postcards that a customer creates on the customers PC using a conventional word processing or page layout program. The customer simply sends, for example through the Internet, the document or page layout files and a mailing list to DirectNET using DirectNET communication and ordering software. Heretofore, third party advertising is not available with DirectNET.

[0009] The present invention provides system and method for adding third party advertising to such remote mail production services. The present invention further provides system and method for improving the effectiveness of third party advertising with conventional production mail inserters operated by high volume mailers. Generally, this is accomplished by letting the third party advertisers establish conditions under which their advertisements would be inserted in each mailpiece and then generating the advertisements with the required documents for the mailpiece. The conditions may be based upon customer (sender) parameters, recipient parameters, quantitative parameters (time, piece count, etc.) or some combination of the above.

[0010] Furthermore, the advertisements may be in the form of printed coupons, which may include secure information, preferably in the form of a bar code, by which the coupon may be authenticated upon redemption. The coupon preferably includes demographic information that can be collected by a retailer, the third party advertiser, or the vendor administering the coupon distribution system.

[0011] In accordance with the present invention, a system and method is provided for printing an advertisement for insertion into a mailpiece. A customer computer system communicates with a mailing service provider data processing system. The customer computer system transmits to the mailing service provider data processing system an electronic copy of at least one mailing address and at least one corresponding document to be mailed to the mailing address. The mailing address is cleansed as necessary by the mailing service provider data processing system, which then identifies a subset of third party advertisements available for insertion into a mailpiece to be assembled with the corresponding document. Enclosures to be printed from the subset of third party advertisements are selected by the customer or automatically by mailing service provider data processing system based on advertisement profiles. The corresponding document and the selected enclosures are printed and then inserted into an envelope to form the assembled mailpiece.

[0012] Therefore, it is now apparent that the present invention substantially addresses the disadvantages associated with the prior art. Additional advantages of the invention will be set forth in the description, which follows, and in part will be obvious from the description,

or may be learned by practice of the invention. The objects and advantages of the invention may be realized and obtained by means of the instrumentalities and combinations particularly pointed out in the appended claims.

[0013] The accompanying drawings, which are incorporated in and constitute a part of the specification, illustrate presently preferred embodiments of the invention, and together with the general description given above and the detailed description of the preferred embodiments given below, serve to explain the principles of the invention. In the drawings, like reference numerals designate like or corresponding parts, and:

Fig. 1 is a simplified representation of a remote mail production system in which an embodiment of the present invention may be incorporated;

Fig. 2 is a simplified representation of a remote production mail system including a data processing system, a printer system and an inserter system which is part of the remote mail production system of Fig. 1;

Fig. 3 is a more detailed representation of the inserter system of Fig. 2;

Fig. 4 a flow chart showing the operation of the remote mail production system in accordance with an embodiment of the present invention;

Fig. 5A is a simplified representation of a data processing system in accordance with an embodiment of the present invention;

Fig. 5B is a schematic representation of a customer data file associated with a customer of the postage printing system in accordance with an embodiment of the present invention;

Fig. 5C is a schematic representation of an ad data file associated with a third party message to be printed on the envelope by the postage printing system in accordance with an embodiment of the present invention; and

Fig. 6 is a flow chart showing the operation of the production mail system in accordance with an embodiment of the present invention.

[0014] Referring to Fig. 1, an example of a remote mail production system 100 in which an embodiment of the present invention may be incorporated is shown. Generally, the remote mail production system 100 includes a remote mail production facility 120 in communication over any suitable communication network 110 (LAN, WAN, telephone line, internet, etc.) with a plurality of remotely located computers (personal computer, workstation, laptop computer or the like) 150. Remote mail production facility 120 includes a production mail system 15 and a data processing system 80. Generally, it is anticipated that the computers 150 would be located in small business offices and/or in private residences and used for a variety of purposes including generating and maintaining mailing lists and documents

to be mailed to the addresses in the mailing lists. The remote mail production facility 120 is maintained and operated by a service provider. The computers 150 may be connected directly to a printer 130 or have access to a printer 130 over the suitable communication network 110. Those skilled in the art will recognize that remote mail production facility 120 may be accessed through a plurality of networks and network types, i.e., each computer 150 does not need to use the same network 110 in contacting the remote mail production facility 120. Likewise, the computer 150 may use one type of network 110 with the remote mail production facility 120 and a different type of network with the printer 130. The remotely located computers 150 are representative of customers wanting the remote mail production facility 120 to assemble and mail their mailpieces (envelopes, post cards, packages and the like).

[0015] Referring to Fig. 2, an example of a typical production mail system 15 at remote mail production facility 120 is shown. Those skilled in the art will appreciate that the exact configuration of the production mail system 15 is particular to the scope of services provided and that many variations are available. Thus, the description that follows is directed to one example of a production mail system 15. Furthermore, the description that follows will be limited to that which is necessary for an understanding of the present invention. The production mail system 15 includes a data processing system 80, a printer system 90 and an inserter system 300. Generally, the data processing system 80 produces a plurality of documents intended for respective recipients. The printer system 90 generates hard copies or printouts of the documents. The inserter system 300 assembles the documents, folds the documents, stuffs the folded documents into respective envelopes to create a mailpiece and otherwise prepares the mailpieces for deposit with a postal authority for delivery.

[0016] The data processing system 80 is operated under the control of a service provider that produces mailpieces for the customers requesting mail generation, assembly and mailing services. Generally, the service provider's host application software program collects and organizes various information relating to individual accounts that customers maintain with the service provider. This information is used to produce customized documents corresponding to each customer's individual account.

[0017] Additionally, the data processing system 80 generates a control code 82 for each document, respectively. The control code 82 contains control information relating to each particular addressee 82a and provides instructions for downstream modules of the production mail system 15 as to how to assemble each particular document 17 to create a mailpiece 301.

[0018] Typically, the control code 82 is printed on a first or address bearing page of each document 17 by the printer system 90 which receives print instructions from the data processing system 80. The printer system

90 may employ any readily available printing technology, such as: electro-photography, ink jet, impact, thermal transfer and the like, to print the pages 17a of the document 17. The print medium fed into the printer system 90 may be a continuous web of paper or cut paper sheets. Additionally, the print medium may contain pre-printed information of a generic character, such as: customer return address information, column headings, information box headings and the like. Thus, the utilization of pre-printed information increases the overall efficiency of the production mail system 15 by allowing the data processing system 80 not to have to generate print instructions for this generic information and requiring the printer system 90 only to print information unique to each addressee.

[0019] The output of the printer system 90 is directed to the inserter system 300. This may be accomplished by directly coupling the output of the printer system 90 to the inserter system 300 or by taking a completed batch of printed documents and loading them into the inserter system 300. Typically, information for control of the inserter system 300 is read from the control code by a scanner (not shown) associated with an upstream module in the inserter system 300, such as those disclosed in U.S. Patent No. 5,008,520 and U.S. Patent No. 5,157,243. Once scanned, the control information is transmitted to a supervisory controller (not shown) of the inserter system 300, which monitors and controls the processing of the documents 17 through each module of the inserter system 300.

[0020] Referring to Fig. 3, a more detailed representation of the various modules (sub-systems) of the inserter system 300 is shown. The inserter system 300 includes a supervisory controller 302, a customer interface 304, an input section 310, a chassis section 340 and an output section 370. The supervisory controller 302 monitors and controls the processing of the documents 17 through each module of the inserter system 300. The customer interface 304 communicates messages to and receives instructions from an operator of the inserter system 300. The input section 310 receives the printed output from the data processing system 80 while the chassis section 340 prepares the mailpieces 301 and the output section 370 performs finishing operations on the mailpieces 301.

[0021] The input section 310 includes an input feeder module 312, and an accumulator module 320. The input feeder module 312 may be comprised of a burster/slitter module (not shown), cut sheet feeder module (not shown) or other such devices (not shown) depending on the type of print medium output by the data processing system 80. The input feeder module 312 singulates the pages 17a and feeds them one at a time to the accumulator module 320. Additionally, the input feeder 312 includes a scanner 314 mounted in proximity to a paper path of the pages 17a so as to read any control code 82 printed thereon. Using the control information contained within the control code 82, the

supervisory controller 302 instructs the accumulator module 320 how many successive pages 17a are contained within each document 17. In conventional fashion, the accumulator module 320 assembles together successive pages 17a all pertaining to a particular document 17, respectively.

[0022] The chassis section 340 accepts the document 17 including all its pages 17a from the accumulator module 320 and performs further operations on the document 17. The chassis section 340 includes a folder module 342, an enclosure feeder module 344 and an insert station module 350. The folder module 342 folds the document 17 into a desired configuration (Z-fold, C-fold, half fold, etc.) and feeds the document 17 to the enclosure feeder module 344 which assembles any desired enclosures 19 to the document 17 to form a collation C. The insert station 350 includes an envelope feeder 352 and inserts the collation C into an envelope 20 to form the mailpiece 301.

[0023] The output section 370 receives the mailpiece 301 and performs finishing operation on the mailpiece 301 so that it is ready for deposit with a carrier, such as the postal authority, for delivery to the addressee. The output section 370 includes a printer module 372, a postage meter module 380 and a stacker module 374. The printer module 372 prints the delivery point zip + 4 in bar code format on the envelope 20. Alternatively, the delivery point bar code may be printed by the printer system 90 in conjunction with the recipient address. The postage meter module 380 prints a postal indicia (not shown) on the envelope 20 and the stacker module 374 stacks the mailpieces 301 neatly for retrieval by the operator.

[0024] Referring now to Fig. 4 with reference to Figs. 1-3, the process for subsidized third party advertising in accordance with an embodiment of the present invention is shown. At step 400, the customer, through computer 150, establishes connection with remote mail production facility 120. At step 410, the customer sends electronically a mailing list and mail contents corresponding to the mailing list to the remote mail production facility 120. At step 420, data processing system 80 cleanses the mailing list and generates a subset of available advertisements. At step 430, data processing system 80 determines whether the customer has requested that data processing system 80 automatically select enclosures for each mailpiece from the subset of available advertisements. If not, the subset of available advertisements are sent to the customer who selects, at step 440, from the subset of available advertisements. The process continues at step 460 below. If the auto select option is in effect at step 430, then, at step 450, data processing system 80 selects the advertisements for each mailpiece generated for the customer. At step 460, data processing system 80 prints the selected advertisements when printing the corresponding mailpiece. At step 470, production mail system 15 assembles each mailpiece including corresponding printed

advertisements. At step 480, data processing system 80 performs the accounting corresponding to the advertisements inserted into the mailpiece.

[0025] Referring to Fig. 5A in view of Figs 1-3, a more detailed schematic of the data processing system 80 is shown. The data processing system 80 may be based on any conventional computer based platform (PC, server, workstation, mainframe or the like) and includes a controller 802, a customer profile 804, an advertiser database 806, an address hygiene database 810, an address demographics database 812 and a communication port 888, all of which are in operative communication with each other using conventional means. Also, the controller 802 may be selectively placed in operative communication with a data center 200 via the communication port 888 using any suitable communication pathway, such as: LAN, WAN, telephone line, internet and the like. The customer profile 804 contains information concerning the customer's account, such as: customer name, customer address, preferred payment vehicle or arrangements (periodic invoice, direct credit card authorization, electronic funds transfer, etc.), and the like, that have been established with a postage meter manufacturer. Similarly, the advertiser database 806 contains information concerning individual advertiser accounts, such as: advertiser name, advertiser address, preferred payment vehicle or arrangements (periodic invoice, direct credit card authorization, electronic funds transfer, etc.), ad data and the like, that have been established with the postage meter manufacturer. The address hygiene database 810 may employ any suitable database for use in cleansing submitted addresses to ensure that they are complete and correct, such as the Address Matching System (AMS) available from the United States Postal Service, Cross Check™ software system available from Pitney Bowes Inc. of Stamford, Connecticut or any other commercially available system for cleansing addresses. The address demographics database 812 may employ any suitable database containing statistics relevant to certain geographic locations. As examples, various databases exist that contain detailed demographic information by zip code, such as: PRIZM available from Claritas Inc. (see Internet URL www.claritas.com), United States census information or any other database that is generally known and commercially available. Generally, the advertiser database 806, the address hygiene database 810 and the address demographics database 812 may be updated from time to time by any conventional means or by direct communications with the data center 200 via the communication port 888.

[0026] Referring to Fig. 5B in view of Figs. 1, 3 and 5A, a schematic representation of the customer profile 804 associated with a particular customer is shown. Generally, a respective customer data profile 804 is established for each of the individual customer accounts and allows each customer to set parameters for controlling third party advertising on their respective envelopes

20. This may be accomplished at the time when the customer opens an account with the remote mail production facility 120 or at any other mutually convenient occasion. The customer data profile 804 includes classification data 804a, preference data 804b, restriction data 804c and frequent address data 804d. The classification data 804a includes an indicator of whether the customer is a commercial customer, a residential customer, or a dual mode customer. Furthermore, for the commercial customer, the classification data 804a may optionally include an additional indicator of the type of business that the customer is involved in. Preferably, a Standard Industry Code (SIC) representative of the customer's business is assigned to each commercial customer, respectively, as part of the classification data 804a. As examples, automobile rental companies would be assigned a SIC in the range of 2100 to 2199, while automobile dealerships would be assigned a SIC in the range of 2400-2499 and service stations would be assigned a SIC in the range of 4000 to 4099. The preference data 804b includes an indicator of whether the customer allows third party advertising at all. In this manner, the customer may by-pass the third party advertising system in its entirety. Optionally, the preference data 804b may include an indication of preferred third party advertisers. Thus, only messages from these preferred third party advertisers would be potentially available for printing on the envelope 20. As yet another option, the preference data 804b may include various default settings, such as: automatic selection of a preferred third party advertiser or automatic selection of the third party advertiser and corresponding message paying the highest subsidy. The restriction data 804c may include addressee restriction data and non-addressee (quantitative) restriction data. In this manner, the customer may indicate in advance those particular recipient addresses 50 where third party advertising is not allowed. The customer non-addressee restriction data, described in detail below, may include: date restriction data; multi-ad restriction data; and ad space restriction data. The frequent address data 804d may include a listing of recipient addresses 50 that are used on a continual basis. In this manner, the customer may select from the frequently used recipient addresses 50 instead of submitting address information. Preferably, address hygiene has already been performed on the frequently used recipient addresses 50. Those skilled in the art will recognize that the above described classification data 804a, preference data 804b, restriction data 804c and frequent address data 804d may be utilized independently from each other or in any desired combination.

[0027] Referring to Fig. 5C in view of Figs. 1, 3 and 5A, a schematic representation of an ad data profile 807 stored in advertiser database 806 and associated with a particular message from a third party advertiser is shown. The ad data includes: graphic image data 807a; subsidy rate data 807b; billing rate data 807c and restriction data. The restriction data may include sender

restriction data 807i, addressee (recipient) restriction data and non-addressee (quantitative) restriction data, or any combination of types of restriction data. Preferably, the sender restriction data 807i includes an indication of whether or not the message may be used with a commercial customer, a residential customer or both. Additionally, the sender restriction data may include another indication of which SIC range or ranges the message is available to. Preferably, the addressee restriction data includes: geographic quantitative data 807d and recipient restriction data 807e. Preferably, the non-addressee restriction data includes: date restriction data 807f; multi-ad restriction data 807g; ad space restriction data 807h and sender restriction data 807i. Those skilled in the art will recognize that the message's date restriction data 807t, multi-ad restriction data 807g and ad space restriction data 807g are directly analogous to the customer's non-addressee restriction data of date restriction data, multi-ad restriction data and ad space restriction data, respectively, from the description provided below. Piece count restriction data and budget limit data defining a maximum amount of advertising charges for a given time period may also be included in the non-address restriction data. The graphic image data 807a is representative of the desired message and may be stored in any manner of well known formats, such as: PDF, JPEG, GIF and the like. The subsidy rate data 807b includes information corresponding to the credit value that will be applied to the customer's account for authorizing printing of the third party message on the envelope 20. The third party advertiser may proscribe different subsidy rates depending upon the Standard Industry Code or SIC range that the customer falls with. Likewise, there may be a different subsidy rate depending upon whether or not the customer is a commercial or residential customer. The billing rate data 807c includes information corresponding to the debit value that will be applied to the third party advertiser's account in conjunction with printing of the third party message on the envelope 20. The geographic restriction data 807d provides an indication of what geographic areas the third party advertiser wants to target. This may be manifested by a restriction on the originating location or the destination location or preferably both. The recipient restriction data 807e provides an indication of the target audience. For example, distinctions may be made between a commercial and a residential address. In the preferred embodiment, the commercial versus residential distinction may be obtained from the Address Matching System. Alternatively, this may also be accomplished by interrogating the hygiened recipient address 50 for certain "key words" indicative of a business entity, such as: inc., incorporated, co., company, associates, and the like or through the use of one of the other databases discussed above. As another example that may be used independent from or in combination with the example previously discussed, the address

demographics database 812 allows further selection. Generally, income, age and other demographic statistics (age, income, education level, marital status, home ownership status, dependent information, ethnicity, etc.) are available for different regions of the country and for certain designated geographic regions. Thus, the delivery point zip code in the hygiened recipient address 50 may be cross referenced to the address demographics database 812 and the resulting other demographic statistics compared with the third party advertiser's requirements. For example, a luxury car manufacturer may only want its messages going to private residences from regions where the average income is above a predetermined threshold. The date restriction data 807f provides an indication of what dates the third party advertiser wants to advertise on. For example, expiration dates could be established beyond which the message will not be dispensed. As another example, periodic cycles (1st week of month, last week of month, on Mondays, 2 weeks before a holiday, etc.) could be established during which the message is available for printing. The multi-ad restriction data 807g provides an indication of whether or not the third party advertiser allows another third party advertiser to occupy ad space 60 on the envelope 20. The sentiment being that a multiplicity of messages will dilute the effectiveness of the individual messages versus if the individual messages were used singularly. If the third party advertiser allows other advertisers, then a reduced subsidy rate 807b and a reduced billing rate 807c may be applied when multiple messages are employed. The ad space restriction data 807h provides an indication of which ad zones 60a, 60b, 60c and 60d the third party advertiser authorizes for use with the message. Thus, the third party advertiser may exercise some control over where on the envelope 20 the message is printed. Similarly, as an option, the customer may also provide an indication of which ad zones 60a, 60b, 60c and 60d the message may be printed in. For example, the customer may be using an envelope 20 with preprinted images already occupying a portion of one or more ad zones 60a, 60b, 60c and 60d. In this scenario, the ad space restriction data 807h and any corresponding customer ad space restriction data must be reconciled. Those skilled in the art will recognize that the above described restriction data 807d, 807e, 807f 807g and 807h may be utilized independently from each other or in any desired combination. Still other restrictions may be utilized, such as piece count limits. It should now be apparent that the messages that meet the restriction criteria and are available for printing represent a subset of the total number of messages that are potentially available.

[0028] With the structure of the production mail system 15 described as above, the operational characteristics will now be described. Referring primarily to Fig. 6 while referencing the structure of Figs. 1-4 and 5A, 5B and 5C, a flow chart of a routine 600 in accordance with the present invention is shown. The routine 600 may be

comprised of any suitable combination of software, firmware and hardware subsystems executed by the production mail system 15. For the sake of clarity and brevity, it is assumed that the customer maintains a valid account with the remote mail production facility 120. It is also assumed that the customer desires to include third party advertising in the assembled mailpieces.

[0029] At 602, the transaction routine 600 commences when the customer submits an electronic copy of a mailing list and mail documents corresponding to the mailing list to the data processing system 80 for processing. The mailing list is comprised of one or more recipient addresses 50 corresponding to a plurality of mailpieces 301, respectively, that the customer desires to send. Once the mailing list and corresponding documents have been received, at 604, the data processing system 80 retrieves the customer data profile file 804 associated with the customer. As described above, the customer data profile file 804 establishes parameters for controlling third party advertising in each of the mailpieces, respectively. For the sake of clarity and brevity, it is assumed that the customer desires to include third party advertising in the mailpieces and has not established the preference data 804b to by-pass the third party advertising system. Next, at 606, the data processing system performs address hygiene each of the submitted addresses. Each of the recipient addresses 50 received from the customer is compared against the address hygiene database 810. At this time, any misspelled words are corrected and any missing information (zip code, zip + 4, street name, etc.) is filled in from the address hygiene database 810 to yield a hygiened or corrected recipient address 50. If the data processing system 80 cannot verify the integrity of the recipient address 50 received from the customer, then the customer may be instructed to check the recipient address 50 and resubmit it.

[0030] Next, at 608, the data processing system 80 searches the third party advertiser database 806 for those messages available for insertion into the assembled mailpieces. This involves taking into consideration the hygiened recipient address 50 and reconciling the preference data 804b and restriction data 804c of the customer with ad data profiles 807 of the third party advertisers. For the reasons discussed above, not every third party advertiser may want to advertise in every assembled mailpiece. The customer data profile file 804 is utilized by the data processing system 80 prior to searching the third party advertiser database 806 for those messages available for as enclosures for the assembled mailpieces. Any short cuts that may be employed that would make the searching quicker and more efficient are identified. For example, if the recipient address 50 indicated by the customer is one of the restricted recipient addressees identified by the customer's addressee restriction data, then no searching at all occurs. As another example, if the customer's prefer-

ence data indicates a preferred third party advertiser listing, then the searching may be limited to only those messages from the preferred third party advertisers. During searching, the ad data profiles of the third party advertisers are applied to the customer and the hygiened recipient address 50. Furthermore, the restriction data of the third party advertisers must be reconciled with the restriction data of the customer. Thus, both sets of restriction data must be satisfied for a message to be available for printing. That is, the customer and the hygiened recipient address 50 must meet the third party advertisers' ad data profile 807 and the third party advertiser must meet the customer's data profile 804.

[0031] Next, at 610, once the available messages are determined, the relevant messages and their corresponding subsidy rate 807b preferably are presented to the customer on the data processing system 80. This provides the customer with the opportunity to view and analyze the available messages along with their corresponding subsidy rate 807b. Next, at 612, the customer selects a message for printing as an enclosure. For the sake of clarity and brevity, it will be assumed that only one (1) message 70 is selected for printing as an enclosure. However, those skilled in the art will recognize that, as described above, multiple messages may be printed on one or more enclosures. Alternatively, if the customer indicates in the preference data 804b a default, such as to the highest paying message, then this activity may be automated.

[0032] Next, at 614, the data processing system 80 generates a message indicator, a subsidy indicator based upon subsidy rate data 807b and a billing indicator based upon billing rate data 807c, all corresponding to the selected message 70 to be printed as an enclosure intended for the hygiened recipient address 50. Next, at 616, the printer system 90 prints the particular documents intended for a particular mailpiece. Next, at 618, the printer system 90 prints the enclosure intended for the particular mailpiece. Next, at 620, the data processing system 80 records the transaction data associated with printing and inserting the selected message 70. Generally, the transaction data includes an indicator of the third party advertiser associated with the selected message 70 and the corresponding subsidy and billing indicators.

[0033] Next, at 622, the transaction data associated for all assembled mailpieces is stored for later reconciliation. Next, at 624, the data processing system 80 uses the transaction data to update the customer account to reflect the transaction data, such as: the date, the hygiened address 50, the selected message 70, the corresponding subsidy, any fees associated with providing the above described services and any other relevant data. Similarly, the data processing system 80 updates the selected third party advertiser's account to reflect the transaction data, such as: the date, the selected message 70, the corresponding billing (advertising) fee,

any additional fees associated with providing the above described services and any other relevant data. At a later time, the remote mail production facility 120 exercises the preferred payment vehicle for the customer and the selected third party advertiser, respectively.

[0034] As previously described, the third party advertisements may be in the form of redeemable coupons. Previously noted related European Patent Application No. (Applicant Docket No. E-737) discloses a redemption system and method that may be used with the present invention.

[0035] Many features of the preferred embodiment represent design choices selected to best exploit the inventive concept as implemented in a particular virtual postage meter environment. However, those skilled in the art will recognize that various modifications can be made without departing from the spirit of the present invention. For example, the address hygiene database 210 and the third party advertiser database 206 may be resident at the remote computer 150. Thus, a portion of the functionality of the remote mail production facility 120 described above would be off loaded to the remote computer 150. The remote computers 150 could then periodically receive updated information concerning the address hygiene database 210 and the third party advertiser database 206 by any conventional means. Thus, those skilled in the art will recognize that there are many ways to distribute the functionality described above between the remote mail production facility 120 and the remote computer 150.

[0036] Therefore, the inventive concept in its broader aspects is not limited to the specific details of the preferred embodiments described above, but is defined by the appended claims and their equivalents.

Claims

1. A production mail system (100), comprising:

a customer computer system (150);
 a mail production facility (120) including an inserter system (300), a printer (90) and a data processing system (80), the mail production facility being remotely located from the customer computer system (150), the data processing system being operatively coupled to the customer computer system;
 means (110) for transmitting to the data processing system (80) from the customer computer system (150) an electronic copy of at least one mailing address and at least one corresponding document to be mailed to the mailing address;
 means for identifying a subset of third party advertisements available for insertion into a mailpiece (20) to be assembled with the corresponding document; and
 means for selecting from the subset of third

- party advertisements enclosures to be included in the assembled mailpiece; wherein the printer (90) prints the corresponding document and the selected enclosures and the inserter system (300) inserts the printed document and printed enclosures to form the assembled mailpiece. 5
2. The production mail system of Claim 1 wherein the data processing system includes (80): 10
- a third party advertiser database (806) having a plurality of ad data profiles, each of the ad data profiles including message data and restriction data, each of the message data representative of an advertisement, respectively, to be printed as an enclosure; 15
- a recipient address (812); and
- a control system (802) in operative communication with the third party advertiser database (806), the control system operable for: 20
- using the restriction data from the plurality of ad data profiles in combination with the recipient address to identify a subset of advertisements available for printing. 25
3. The production mail system of Claim 2, wherein:
- the control system (802) is further operable for: 30
- receiving an indication of the selected enclosures from the subset of third party advertisements authorized for printing.
4. The production mail system of Claim 2 or 3, wherein the selected third party advertisements include redeemable coupons. 35
5. A method for printing an advertisement for insertion into a mailpiece (20), the method comprising the steps of: 40
- making (400) a connection between a customer computer system (150) and mailing service provider computer system (120); 45
- transmitting (410) to the mailing service provider computer system (120) from the customer computer system (150) an electronic copy of at least one mailing address and at least one corresponding document to be mailed to the mailing address; 50
- performing (420) address cleansing (810) as necessary to the mailing address;
- identifying (420) a subset of third party advertisements available for insertion into a mailpiece to be assembled with the corresponding document; 55
- selecting (440) from the subset of third party advertisements (806) enclosures to be included in the assembled mailpiece;
- printing (460) the corresponding document and the selected enclosures; and
- inserting (470) the printed document and printed enclosures to form the assembled mailpiece (20).
6. A method operating a mail production facility (120) which is remotely located from a customer computer system (150), the method comprising the steps of:
- making (400) a connection between the customer computer system (150) and a second computer system (120) at the mail production facility;
- receiving from the customer computer system (150) an electronic copy of at least one mailing address and at least one corresponding document to be mailed to the mailing address;
- performing (420,606) address cleansing (810) as necessary to the mailing address;
- identifying (420) a subset of third party advertisements available for insertion into a mailpiece to be assembled with the corresponding document;
- selecting (440,612) from the subset of third party advertisements enclosures to be included in the assembled mailpiece (20);
- printing (460,616) the corresponding document and the selected enclosures; and
- inserting (470) the printed document and printed enclosures to form the assembled mailpiece (20).
7. The method of Claim 5 or 6 wherein the third party advertisements are redeemable coupons.
8. The method of Claim 5, 6 or 7 wherein the identifying step comprises the steps of:
- providing a third party advertiser database having a plurality of ad data profiles, each of the ad data profiles including message data and restriction data, each of the message data representative of an advertisement, respectively, to be printed as an enclosure;
- providing a recipient address; and
- using the restriction data from the plurality of ad data profiles in combination with the recipient address to identify a subset of advertisements available for printing.
9. The method of any one of Claims 5 to 8, further comprising the step of:
- storing transaction data associated with printing the selected enclosures.

10. The method of any one of Claims 5 to 9, further comprising the step of:

applying a credit to an account of the customer
and applying a debit to the advertiser account 5
corresponding to the printed enclosures.

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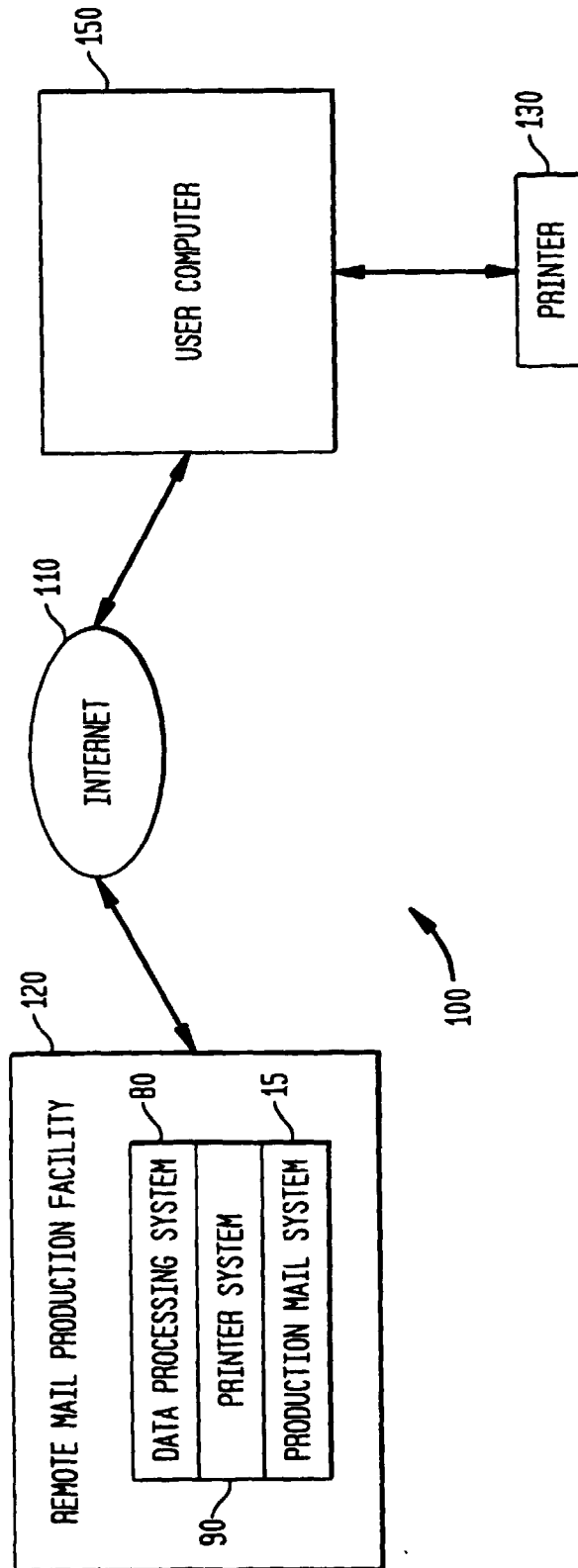
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FIG. 1



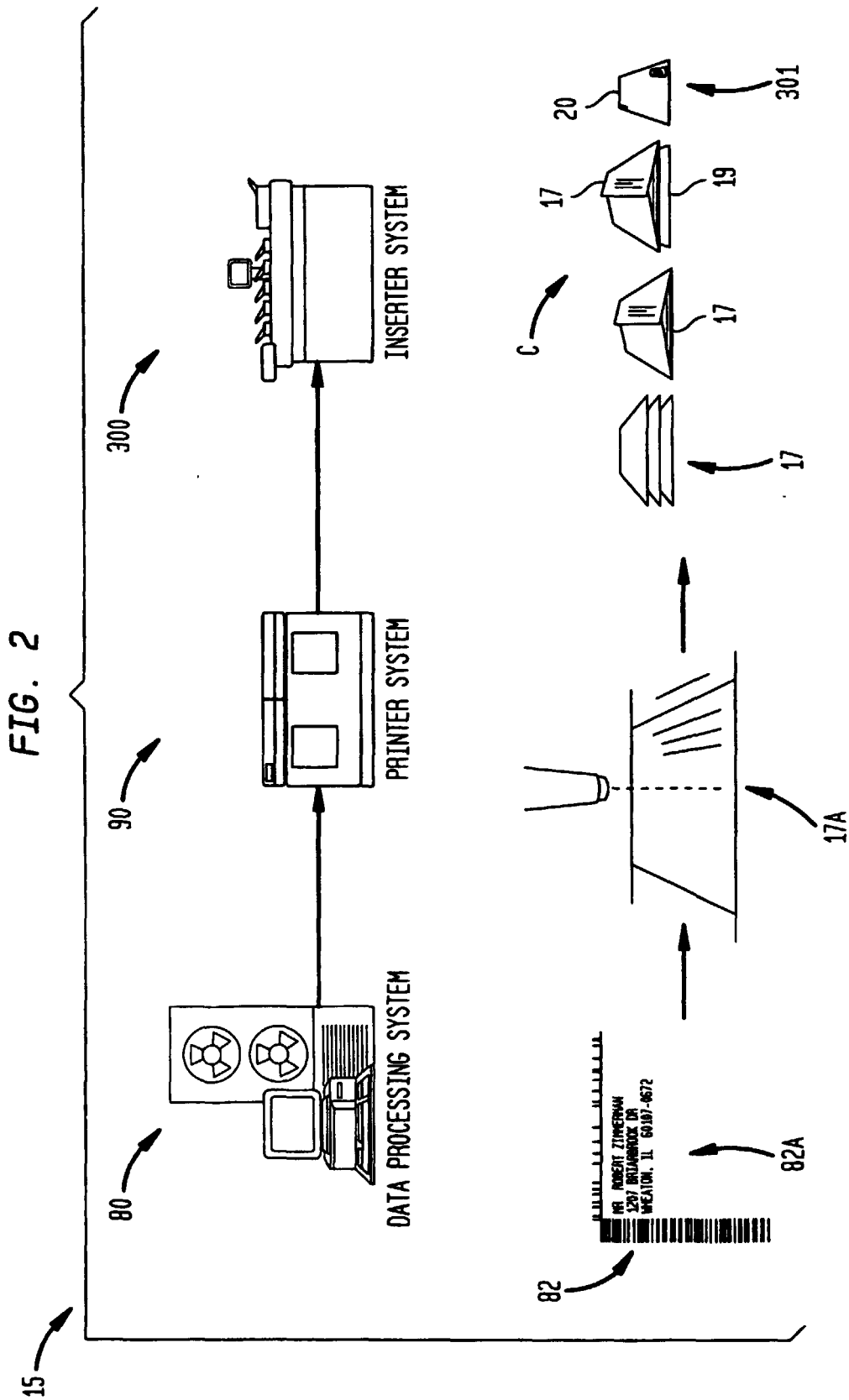


FIG. 3

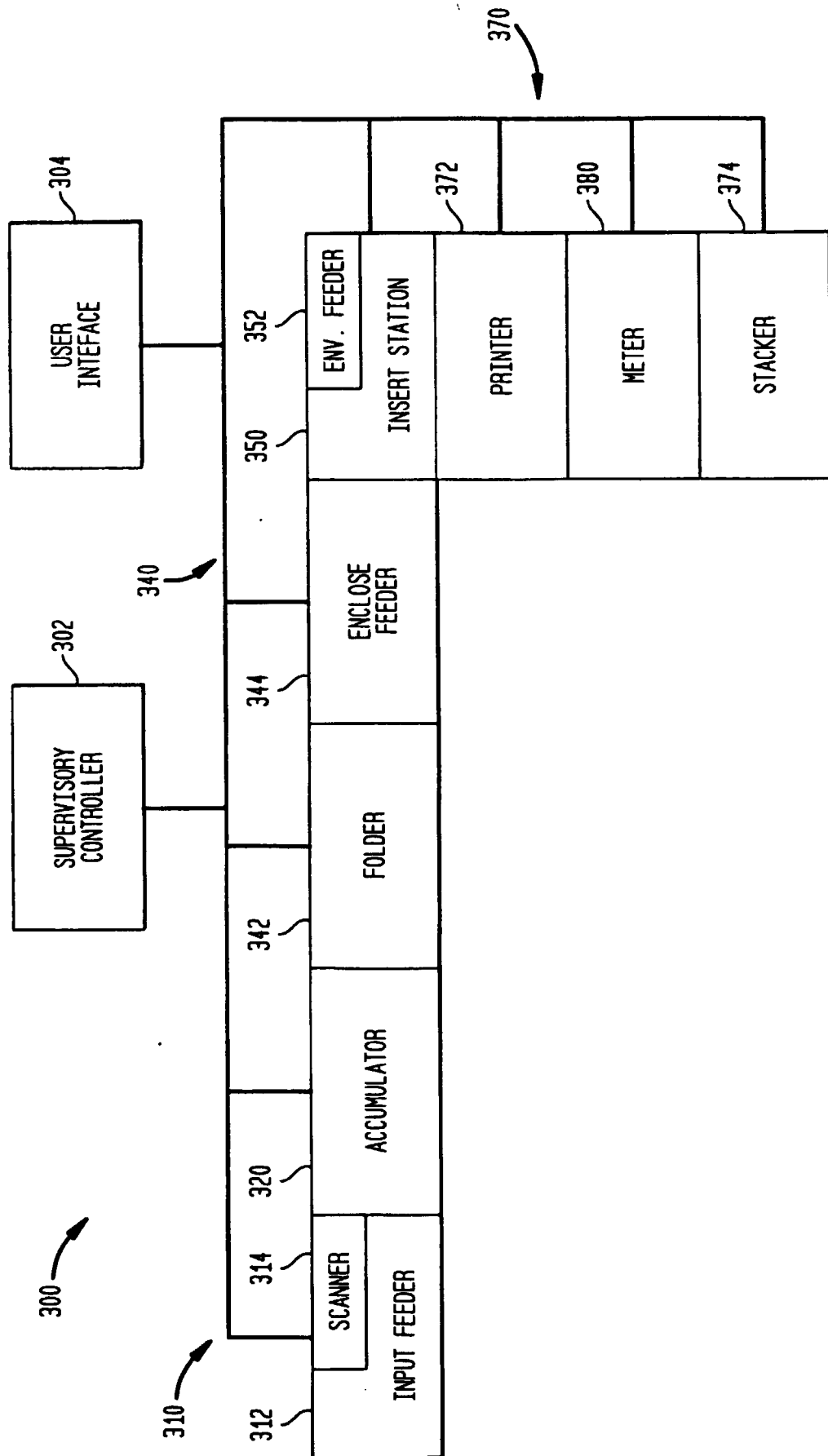
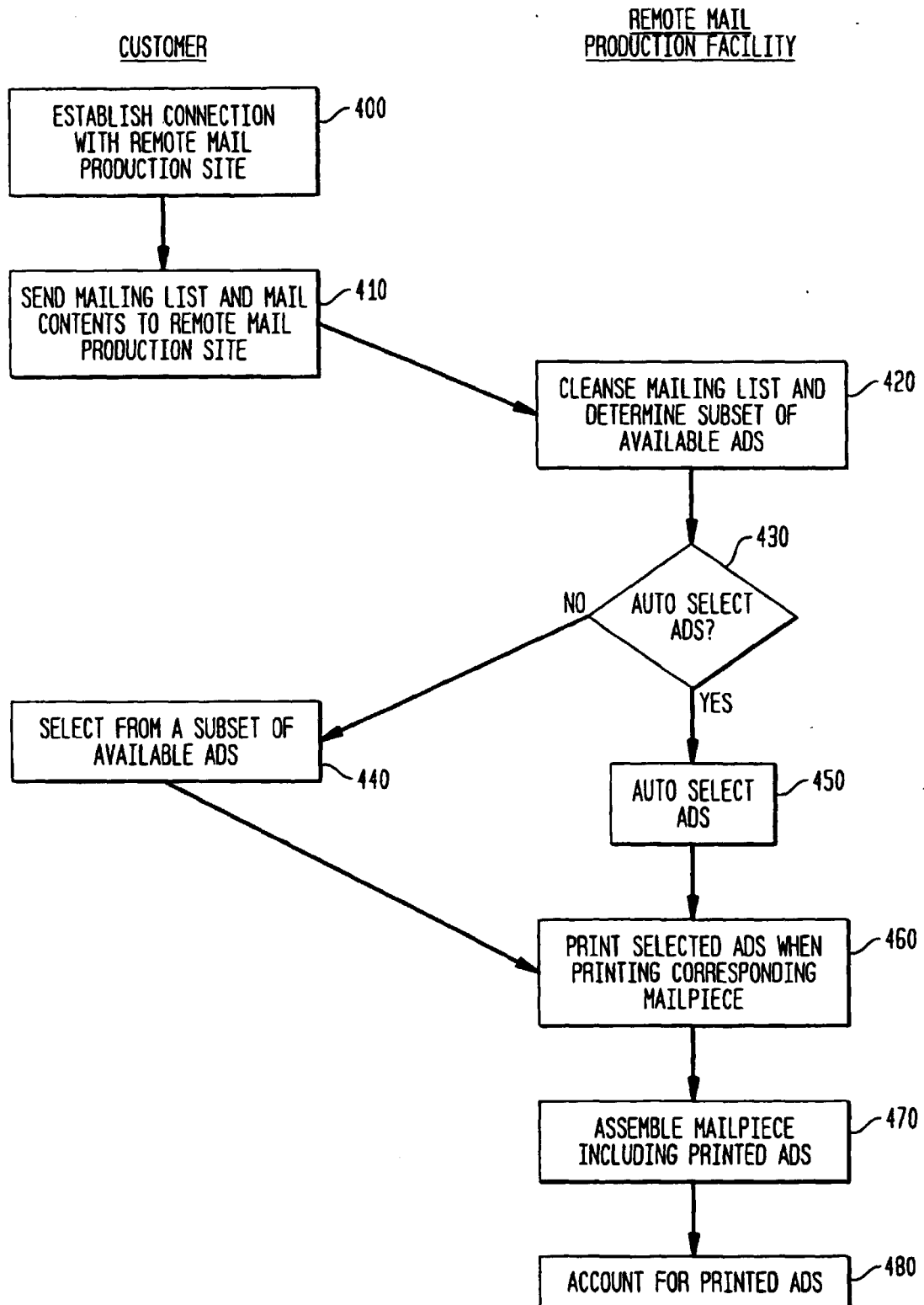


FIG. 4



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FIG. 5A

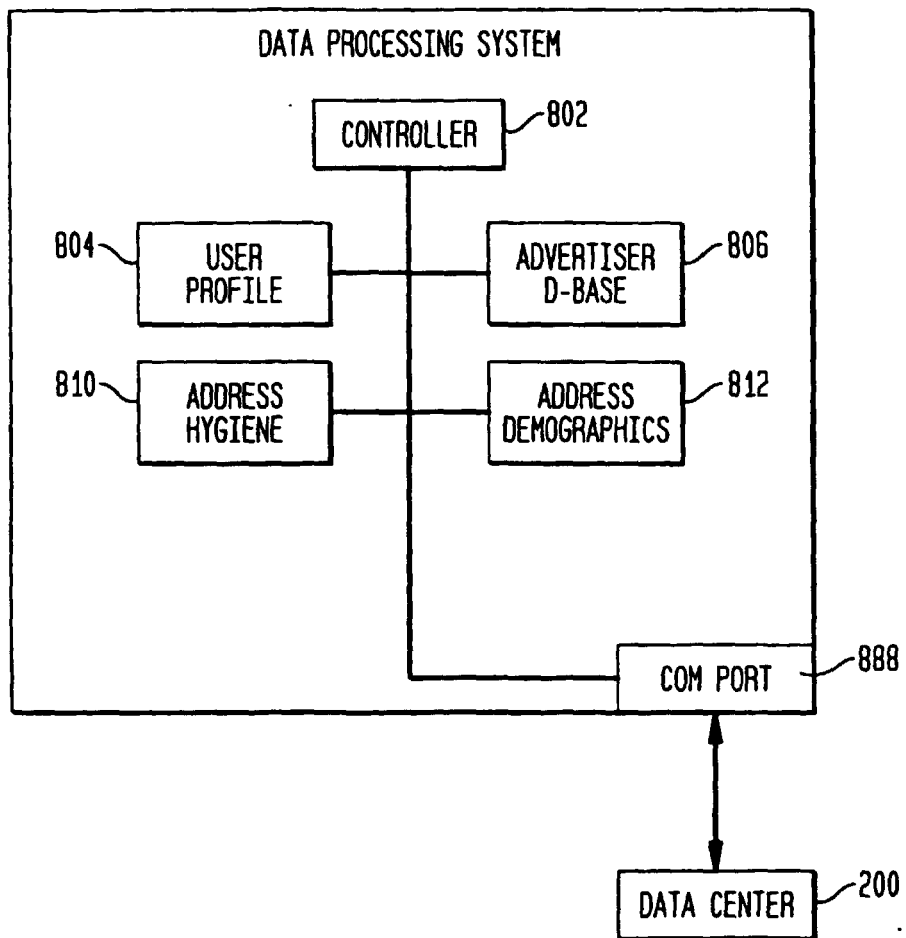


FIG. 5B

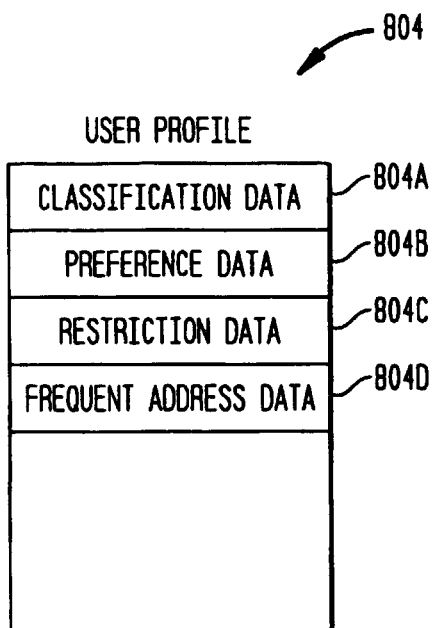


FIG. 5C

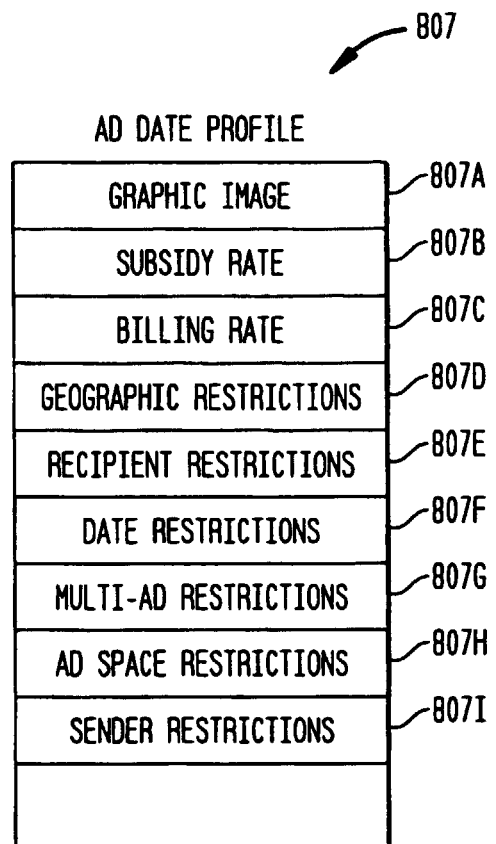


FIG. 6

