



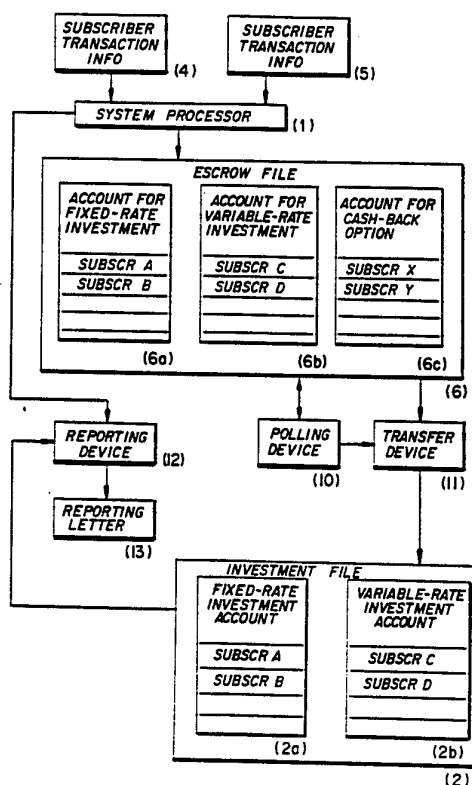
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<p>(21) International Application Number: PCT/US93/07533 (22) International Filing Date: 11 August 1993 (11.08.93) (30) Priority data: 07/927,162 11 August 1992 (11.08.92) US (71) Applicant: S.T.A.R.T., INC. [US/US]; 13100 Worldgate Drive, Herndon, VA 22077 (US). (72) Inventors: HARTT, Richard, W. ; 5820 Biscayne Drive, Alexandria, VA 22303 (US). BURGER, Lewis, S. ; 139 Boulder Ridge Road, Scarsdale, NY 10583 (US). MA-HAFFEY, C., Lloyd ; 2705 Silkwood Court, Oakton, VA 22124 (US). (74) Agents: KOCH, Robert, J. et al. ; Fulbright &amp; Jaworski, 801 Pennsylvania Avenue, N.W., Washington, DC 20004-2604 (US).</p>		<p>(81) Designated States: AU, CA, JP, RU, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  <b>Published</b> <i>With international search report.</i></p>

(54) Title: TRANSACTION PROCESSING SYSTEM

(57) Abstract

A purchase rebate system with investment plan allows subscribers to purchase goods and services from participating vendors and invest a portion of the purchase price in a personal investment program. A subscriber rebate is calculated for each subscriber from subscriber transaction information submitted by each participating vendor. Subscriber transaction information may include subscriber identification, a description of purchased goods and services, purchase price, and time and place of purchase for each transaction between a subscriber and participating vendor. The subscriber rebate is then transferred to an investment account. The system may also provide for the recruitment of new subscribers, the recruitment of additional participating vendors, and the distribution of commissions to system representatives who also recruit new subscribers.



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## TRANSACTION PROCESSING SYSTEM

### BACKGROUND OF THE INVENTION

#### 1. Field of the Invention

5 The invention relates to a transaction processing system and more particularly to a system with a deferred rebate feature.

#### 2. Description of the Related Technology

10 A previous transactional system allowed subscriber-purchasers to receive goods or services from a vendor by ordering them from a purchasing system and paying the purchase price to an escrow agent or a purchase processing center. In U.S. Patent 4,750,119 Cohen et al., herein incorporated by reference, the escrow agent or a purchase processing center paid the vendor the wholesale price for the goods or services and used the remainder of the funds in escrow to purchase an aggregate annuity policy from an insurance company. The insurance  
15 company computed and reported a rebate factor which guaranteed a specific rebate amount in the future.

### SUMMARY OF THE INVENTION

20 An object of the invention is to reduce participating vendor advertising costs. A further object is to provide a purchase rebate to subscribers. An additional object of the invention is to provide and manage a personal investment program for subscribers. Another object is to attract additional subscribers and participating vendors.

25 In a retail market where many vendors are selling equivalent products, consumers have little reason to remain loyal to any particular vendor. Vendors such as grocery stores, department stores, long distance phone service carriers, automobile dealerships, mortgage

and real estate agents, hotels, travel agents, and airlines often resort to continual advertising to attract and retain customers. High cost and low effectiveness, however, are drawbacks to this continual advertising program.

5           For vendors, the purchase rebate system with investment plan is an alternative to expensive advertising. Vendors do not have to purchase costly advertising to get a subscriber's business, because a subscriber rebate gives subscribers an incentive to purchase goods or services from participating vendors. This subscriber rebate is made up  
10 of a portion of the purchase price which can represent some of the participating vendors' savings in advertising costs. Subscriber rebates may be invested in a personal investment program or paid back to the subscriber. In addition, rebates may initially be placed in an escrow account and subsequently distributed to an investment program, for  
15 further purchases or to the subscriber. Each subscriber receives information regarding purchases made under the system, escrow account activity and balance, and investment account activity and balance. Additionally, the system may have a recruiting subsystem to recruit participating vendors, attract new subscribers and verify their  
20 applications, and provide incentives to system representatives who also attract new subscribers.

#### BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 shows a block diagram of the preferred embodiment of the system.

25           Figure 2 shows a flow chart of the recruiting subsystem for recruiting new subscribers.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

A transaction between a buyer and a vendor occurs when a subscriber purchases goods and/or services from a participating vendor and pays a purchase price. According to a block diagram of the preferred embodiment shown in Figure 1, a system processor 1 receives subscriber transaction information 4, 5 from each participating vendor regarding each subscriber's purchases from that vendor. Alternatively, the transaction information may be received from the subscriber. Subscriber transaction information may include subscriber identification, a description of the purchased goods and services, the price of the goods or services, and the time and place of purchase. Subscriber transaction information may be transferred through media such as magnetic file, written records, or electronic data transfer. The processor calculates a subscriber rebate representing a predetermined portion of each subscriber's purchase payment and transfers the subscriber rebate to an investment or pay-out system. According to one embodiment, the rebate may pass through an intermediate stage. The intermediate stage may be a holding area to allow the rebate amount to accumulate to a predetermined level before further processing or handling. The intermediate stage may be an escrow file 6.

The escrow file 6 may be divided into separate accounts, such as one account for each investment vehicle 6a, 6b and a separate account for subscribers who exercise the cash-back option 6c rather than choosing to invest their subscriber rebates. Each escrow account may have administrative allocations to identify each subscriber with funds in that account. Escrow funds can then be transferred to individual investment accounts.

Instead of transferring a subscriber rebate from a subscriber's escrow account to the subscriber's investment account individually, it

is more cost efficient to transfer a larger amount of escrow funds at one time. Preferably, after a subscriber's escrow account has accumulated a threshold amount of subscriber rebate, such as \$100, the escrow funds can be transferred to the subscriber's investment account.

5 A polling device 10 may sequentially read each subscriber's escrow account, and if the escrow account is larger than the threshold amount when the account is polled, the polling device will trigger the transfer device 11 to transfer funds from the subscriber's escrow account to the subscriber's investment account. Alternatively, transfers from an  
10 escrow account to an investment account may be accomplished by setting a flag if a subscriber's escrow account reaches the threshold amount and transferring the funds when the flag is set.

Many investment vehicle options exist. For example, the system might allow a subscriber to choose to invest subscriber rebate funds in  
15 a fixed-rate annuity 2a, a variable-rate annuity 2b, an equity-based mutual fund, or a bond-based mutual fund. Alternatively, the subscriber may choose to receive the rebate amount in cash. Subscribers may also deposit funds directly into their investment accounts in addition to investing subscriber rebates.

20 Periodic communications between the system and each subscriber may take the form of a periodic statement or letter 13 generated by a reporting device 12. This letter may include information regarding recent purchases made under the purchase rebate system with investment plan such as price, date, place, and  
25 description of purchased goods or services, escrow and investment account activity and balance, and a future payback forecast in the form of the investment account's projected value in a fixed amount of time, such as 20 or 30 years, or when the subscriber reaches a certain age, such as 65.

30 New subscribers may be acquired directly through a recruiting subsystem or through a system representative as shown in Figure 2.

The recruiting subsystem may distribute information and applications through the mail, or it may place newspaper, magazine, radio, television, or other media advertisements 1. Alternatively, a system representative may approach a person or a group of people such as a professional organization, a special interest group, or a business. By signing up new subscribers, system representatives can receive incentives. A system representative can be a single person, a group of people, a subscriber, or a non-subscriber such as a benefits broker.

A system representative successfully recruits new subscribers by providing a new subscriber's completed application to the recruiting subsystem 4 or providing a non-subscriber's mailing address to the recruiting subsystem 15 which results in a completed new subscriber's application. After receiving a non-subscriber's mailing address 2, the recruiting subsystem mails an application to the non-subscriber 3 and awaits the return of the completed application.

After an application is received by the recruiting subsystem 5, it checks the applications for completeness 6. If the application is incomplete, the recruiting subsystem returns the application to the applicant for further information 7. If the application is complete, the recruiting subsystem verifies the name and address of the applicant 8. If the name and address are invalid, the subsystem rejects the application 14. If the name and address are valid, the recruiting subsystem assigns the applicant a unique subscriber identification number 9. The recruiting subsystem then adds the new subscriber to the escrow and investment files 10.

Generally, the recruiting subsystem collects a periodic maintenance fee and a one-time new-subscriber fee from each subscriber. The system representative or recruiting subsystem, however, may offer a variety of subscriber incentives which waive a portion of either or both fees. For instance, as one person's subscriber incentive, the recruiting subsystem may waive collection of the new-

subscriber fee and the first year of maintenance fees. A different subscriber incentive would be to waive all maintenance fees.

5 Recruiting incentives for system representatives take the form of a commission, distributed when a system representative signs up a new subscriber or when a new subscriber makes a purchase. For example, commissions may take the form of a flat rate when a new subscriber enrolls, a percentage of the new subscriber's purchases, or both. An agent receives credit for recruiting a new subscriber 13 when the agent provided the address or application 11.

10 The recruiting subsystem may also recruit vendors for participation in the system. The recruiting subsystem provides a specially-tailored vendor inducement to a new participating vendor. For example, the vendor may transfers only a 3% rebate of each subscriber's purchase price to the escrow account for one year. If the vendor is satisfied with the system after the first year, the vendor transfers a full 6% rebate to the system in following years. The predetermined vendor rebate may be different for each participating vendor depending upon the vendor's willingness to participate in the system, and the size, prestige, and notoriety of the vendor.

20 The scope of the invention is not to be limited by the description of the preferred embodiment. The embodiment described is by way of example and should not be construed as limiting of the claims. The claims below are set forth to define the scope of the invention.



## WE CLAIM:

- 1 1. A purchase system with investment plan comprising:  
2 processing means for calculating and accumulating a subscriber  
3 rebate for each subscriber from subscriber transaction information  
4 obtained from at least one vendor, said subscriber transaction  
5 information including subscriber identification and purchase price for  
6 each transaction for goods or services between a subscriber and said  
7 vendor;  
8 transfer means, connected to said processing means, for  
9 transferring said subscriber rebate to an investment file;  
10 and reporting means, connected to said investment file and said  
11 processing means, for preparing a report for each subscriber containing  
12 subscriber transaction information, subscriber rebate, and transferred  
13 subscriber rebate.
- 1 2. A system according to claim 1 wherein said transfer means  
2 comprises a first transfer means for transferring each subscriber's said  
3 subscriber rebate to an escrow file and a second transfer means for  
4 transferring each subscriber's said subscriber rebate from said escrow  
5 file to said investment file under predetermined conditions.

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1 3. A system according to claim 1 wherein said subscriber  
2 transaction information includes date of purchase, description of  
3 purchased goods or services, and vendor identification.

1 4. A system according to claim 2 wherein said second transfer  
2 means includes a polling means for obtaining subscriber rebate data  
3 from said escrow file and enabling said second transfer means under  
4 predetermined conditions.

1 5. A system according to claim 4 wherein said predetermined  
2 condition is when said subscriber rebate in said escrow file represents  
3 more than a predetermined amount.

1 6. A system according to claim 5 wherein said predetermined  
2 amount is \$100.

1 7. A system according to claim 1 further comprising a recruiting  
2 subsystem for adding new subscribers which receives and verifies  
3 applications and provides recruiting incentives to system  
4 representatives.

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1 8. A system according to claim 1 wherein said report further  
2 contains an investment forecast which estimates the value of the  
3 investment account in a predetermined amount of time.

1 9. A system according to claim 8 wherein said predetermined  
2 amount of time is 20 years.

1 10. A system according to claim 8 wherein said predetermined  
2 amount of time is 30 years.

1 11. A system according to claim 8 wherein said predetermined  
2 amount of time is when subscriber reaches a predetermined age.

1 12. A system according to claim 11 wherein said predetermined age  
2 is 65.

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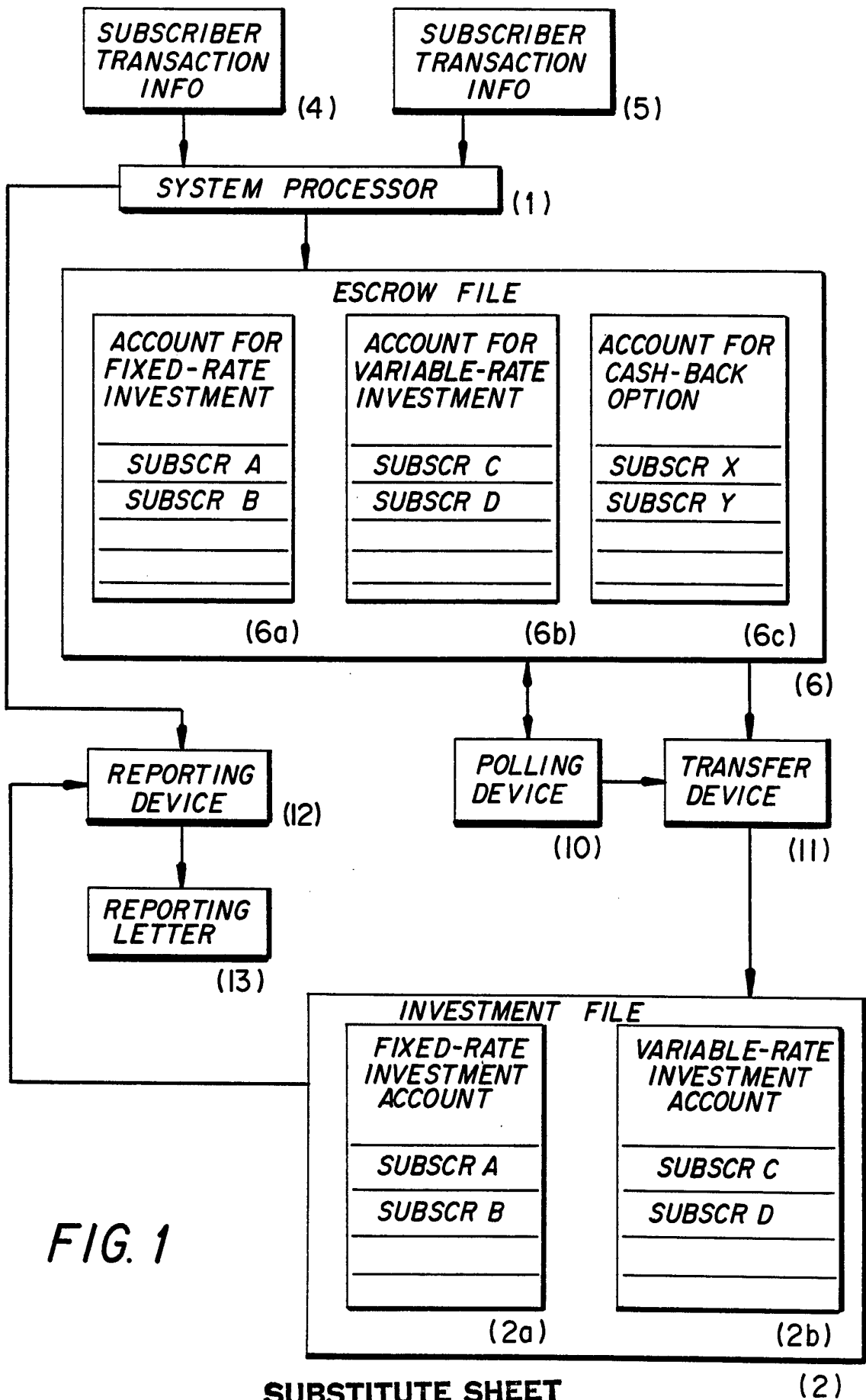
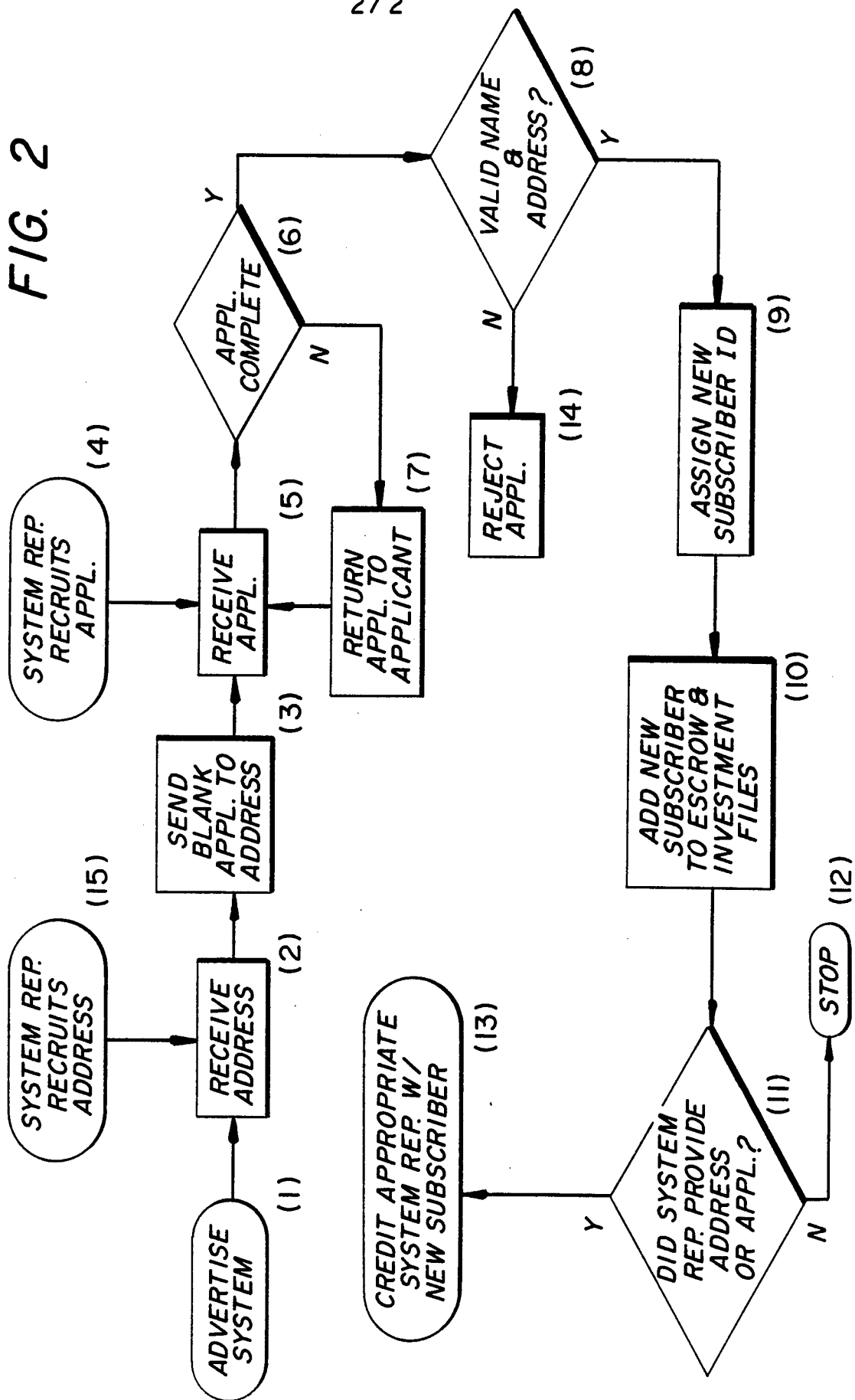


FIG. 1

FIG. 2



INTERNATIONAL SEARCH REPORT

Intern: 1 Application No  
PCT/US 93/07533

<p>A. CLASSIFICATION OF SUBJECT MATTER IPC 5 G06F15/21</p> <p>According to International Patent Classification (IPC) or to both national classification and IPC</p>																				
<p>B. FIELDS SEARCHED</p> <p>Minimum documentation searched (classification system followed by classification symbols) IPC 5 G06F G07G</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched</p> <p>Electronic data base consulted during the international search (name of data base and, where practical, search terms used)</p>																				
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <table border="1"> <thead> <tr> <th>Category *</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X</td> <td>US,A,4 750 119 (COHEN ET AL.) 7 June 1988 cited in the application see the whole document ---</td> <td>1-12</td> </tr> <tr> <td>A</td> <td>EP,A,0 308 224 (MERIDIAN ENTERPRISES) 22 March 1989 see abstract ---</td> <td>1-12</td> </tr> <tr> <td>A</td> <td>WO,A,91 03789 (CITICORP POS INFORMATION SERVICES) 21 March 1991 see abstract ---</td> <td>1-12</td> </tr> <tr> <td>A</td> <td>EP,A,0 253 240 (OMRON TATEISI ELECTRONICS) 20 January 1988 see page 3, column 4, line 36 - line 41 ---</td> <td>1-12</td> </tr> <tr> <td></td> <td style="text-align: center;">-/--</td> <td></td> </tr> </tbody> </table>			Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X	US,A,4 750 119 (COHEN ET AL.) 7 June 1988 cited in the application see the whole document ---	1-12	A	EP,A,0 308 224 (MERIDIAN ENTERPRISES) 22 March 1989 see abstract ---	1-12	A	WO,A,91 03789 (CITICORP POS INFORMATION SERVICES) 21 March 1991 see abstract ---	1-12	A	EP,A,0 253 240 (OMRON TATEISI ELECTRONICS) 20 January 1988 see page 3, column 4, line 36 - line 41 ---	1-12		-/--	
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<p><input checked="" type="checkbox"/> Further documents are listed in the continuation of box C.      <input checked="" type="checkbox"/> Patent family members are listed in annex.</p>																				
<p>* Special categories of cited documents :</p> <table border="0"> <tr> <td style="vertical-align: top;"> <p>*A* document defining the general state of the art which is not considered to be of particular relevance</p> <p>*E* earlier document but published on or after the international filing date</p> <p>*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>*O* document referring to an oral disclosure, use, exhibition or other means</p> <p>*P* document published prior to the international filing date but later than the priority date claimed</p> </td> <td style="vertical-align: top;"> <p>*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>* &amp; * document member of the same patent family</p> </td> </tr> </table>			<p>*A* document defining the general state of the art which is not considered to be of particular relevance</p> <p>*E* earlier document but published on or after the international filing date</p> <p>*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>*O* document referring to an oral disclosure, use, exhibition or other means</p> <p>*P* document published prior to the international filing date but later than the priority date claimed</p>	<p>*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>* &amp; * document member of the same patent family</p>																
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<p>Date of the actual completion of the international search</p> <p style="text-align: center;">11 November 1993</p>		<p>Date of mailing of the international search report</p> <p style="text-align: center;">03.12.93</p>																		
<p>Name and mailing address of the ISA</p> <p>European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+ 31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+ 31-70) 340-3016</p>		<p>Authorized officer</p> <p style="text-align: center;">BUROE, P</p>																		

## INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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