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CENTRAL DISTRICT OF CALIFORNIA
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8 Attorneys for Plaintiff, OLYMPIC DEVELOPMENTS AG, LLC

9 UNITED STATES DISTRICT COURT
10 FOR THE CENTRAL DISTRICT OF CALIFORNIA
11 LOS ANGELES DIVISION

12 OLYMPIC DEVELOPMENTS AG, LLC,
13 Plaintiff,

14 v.

15 MICROSOFT CORPORATION, NINTENDO
16 OF AMERICA, INC, SONY COMPUTER
17 ENTERTAINMENT OF AMERICA, LLC,
18 VALVE CORPORATION,
19 Defendants.

Case No.

CV 10 8874 - SJO
(VBR/K)

COMPLAINT FOR PATENT
INFRINGEMENT

Jury Trial Demanded

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COMPLAINT FOR PATENT INFRINGEMENT

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PLAINTIFF'S ORIGINAL COMPLAINT

Plaintiff Olympic Developments AG, LLC ("Plaintiff"), by and through its undersigned counsel, files this Original Complaint against Microsoft Corporation, Nintendo of America, Inc., Sony Computer Entertainment of America, LLC, and Valve Corporation (collectively "Defendants") as follows:

NATURE OF THE ACTION

1. This is a patent infringement action to stop Defendants' infringement of Plaintiff's United States Patent No. 5,475,585 entitled "*Transactional Processing System*" (the "'585 patent"; a copy of which is attached hereto as Exhibit A) and United States Patent No. 6,246,400 entitled "*Device for Controlling Remote Interactive Receiver*" (the "'400 patent"; a copy of which is attached hereto as Exhibit B) (collectively, "the patents-in-suit"). Plaintiff is the exclusive licensee of the '585 patent and '400 patent with respect to the Defendants. Plaintiff seeks injunctive relief and monetary damages.

PARTIES

2. Plaintiff is a limited liability company organized and existing under the laws of the State of Delaware. Plaintiff maintains its principal place of business at 1000 North West Street, Suite 1200, Wilmington, DE 19801. Plaintiff is the exclusive licensee of the '585 and '400 patents with respect to the Defendants, and possesses the right to sue for infringement and recover past damages.

3. Upon information and belief, Microsoft Corporation, ("Microsoft") is a corporation organized and existing under the laws of the State of Washington, with its principal place of business located at 1 Microsoft Way, Redmond, Washington 98052.

4. Upon information and belief, Nintendo of America, Inc. ("Nintendo") is a corporation organized and existing under the laws of the State of Washington, with its principal place of business located at 4600 150th Avenue NE, Redmond, Washington 98052.

5. Upon information and belief, Sony Computer Entertainment of America, LLC, ("SCEA") is a limited liability company organized and existing under the laws of the State of

1 Delaware, with its principal place of business located at 919 East Hillsdale Boulevard, Foster
2 City, California 94404.

3 6. Upon information and belief, Valve Corporation (“Valve”) is a corporation
4 organized and existing under the laws of the State of Washington, with its principal place of
5 business located at 8411 Preston Road, Suite 650, Dallas, Texas 75225.

6 **JURISDICTION AND VENUE**

7 7. This action arises under the Patent Laws of the United States, 35 U.S.C. § 1 *et*
8 *seq.*, including 35 U.S.C. §§ 271, 281, 283, 284, and 285. This Court has subject matter
9 jurisdiction over this case for patent infringement under 28 U.S.C. §§ 1331 and 1338(a).

10 8. The Court has personal jurisdiction over each Defendant because: each Defendant
11 is present within or has minimum contacts with the State of California and the Central District of
12 California; each Defendant has purposefully availed itself of the privileges of conducting business
13 in the State of California and in the Central District of California; each Defendant has sought
14 protection and benefit from the laws of the State of California; each Defendant regularly conducts
15 business within the State of California and within the Central District of California; and
16 Plaintiff’s causes of action arise directly from Defendants’ business contacts and other activities
17 in the State of California and in the Central District of California.

18 9. More specifically, each Defendant, directly and/or through authorized
19 intermediaries, ships, distributes, offers for sale, sells, and/or advertises (including the provision
20 of an interactive web page) its products and services in the United States, the State of California,
21 and the Central District of California. Upon information and belief, each Defendant has
22 committed patent infringement in the State of California and in the Central District of California,
23 has contributed to patent infringement in the State of California and in the Central District of
24 California, and/or has induced others to commit patent infringement in the State of California and
25 in the Central District of California. Each Defendant solicits customers in the State of California
26 and in the Central District of California. Each Defendant has many paying customers who are
27 residents of the State of California and the Central District of California and who each use each of
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1 the respective Defendant's products and services in the State of California and in the Central
2 District of California.

3 10. Venue is proper in the Central District of California pursuant to 28 U.S.C. §§ 1391
4 and 1400(b).

5 **COUNT I – PATENT INFRINGEMENT**

6 11. The '585 patent was duly and legally issued by the United States Patent and
7 Trademark Office on December 12, 1995, after full and fair examination for systems and methods
8 for purchasing products over a network. Plaintiff is the exclusive licensee of the '585 patent with
9 respect to the Defendants, and possesses all rights of recovery under the '585 patent with respect
10 to the Defendants, including the right to sue for infringement and recover past damages.

11 12. The '400 patent was duly and legally issued by the United States Patent and
12 Trademark Office on June 12, 2001, after full and fair examination for systems for transactional
13 system terminals. Plaintiff is the exclusive licensee of the '400 patent with respect to the
14 Defendants, and possesses all rights of recovery under the '400 patent with respect to the
15 Defendants, including the right to sue for infringement and recover past damages.

16 13. Plaintiff is informed and believes that Microsoft owns, operates, advertises,
17 controls, sells, and otherwise provides hardware, software and websites for "online game and
18 video services" including via the Microsoft Xbox 360 ("the Microsoft device") and Microsoft
19 Xbox Live Marketplace ("the Microsoft service"), both available through www.xbox.com. Upon
20 information and belief, Microsoft has infringed and continues to infringe one or more claims of
21 the '585 patent by making, using, providing, offering to sell, and selling (directly or through
22 intermediaries), in this district and elsewhere in the United States, systems and methods for
23 purchasing products and services and processing corresponding financial transactions, including
24 via the Microsoft service and Microsoft device. Upon information and belief, Microsoft has
25 infringed and continues to infringe one or more claims of the '400 patent by making, using,
26 providing, offering to sell, and selling (directly or through intermediaries), in this district and
27 elsewhere in the United States, systems and methods for remotely selecting and receiving desired
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1 programming selections, including via the Microsoft service and Microsoft device. More
2 particularly, Plaintiff is informed and believes that Microsoft has and/or requires and/or directs
3 users to access and/or view and/or purchase products from a remote programming system at the
4 Xbox Live Marketplace via an XBox remote receiver device in a manner claimed in the patents-
5 in-suit. Upon information and belief, Microsoft has also contributed to the infringement of one or
6 more claims of the patents-in-suit by providing to users, in this district and elsewhere in the
7 United States via the Microsoft service and the Microsoft device, software only useful for
8 permitting users to purchase products and services from a plurality of available products and
9 service and for processing corresponding financial transactions in real-time in a manner claimed
10 by one or more claims of the patents-in-suit.

11 14. Plaintiff is informed and believes that Nintendo owns, operates, advertises,
12 controls, sells, and otherwise provides hardware, software and websites for “online game and
13 video services” including via the Nintendo Wii (“the Nintendo device”) and Nintendo Wii Shop
14 (“the Nintendo service”), both available through www.Nintendo.com. Upon information and
15 belief, Nintendo has infringed and continues to infringe one or more claims of the ’585 patent by
16 making, using, providing, offering to sell, and selling (directly or through intermediaries), in this
17 district and elsewhere in the United States, systems and methods for purchasing products and
18 services and processing corresponding financial transactions, including via the Nintendo service
19 and Nintendo device. Upon information and belief, Nintendo has infringed and continues to
20 infringe one or more claims of the ’400 patent by making, using, providing, offering to sell, and
21 selling (directly or through intermediaries), in this district and elsewhere in the United States,
22 systems and methods for remotely selecting and receiving desired programming selections,
23 including via the Nintendo service and Nintendo device. More particularly, Plaintiff is informed
24 and believes that Nintendo has and/or requires and/or directs users to access and/or view and/or
25 purchase products from a remote programming system at the Nintendo Wii Shop Channel via a
26 Wii remote receiver device in a manner claimed in the patents-in-suit. Upon information and
27 belief, Nintendo has also contributed to the infringement of one or more claims of the patents-in-

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1 suit by providing to users, in this district and elsewhere in the United States via the Nintendo
2 service and the Nintendo device, software only useful for permitting users to purchase products
3 and services from a plurality of available products and service and for processing corresponding
4 financial transactions in real-time in a manner claimed by one or more claims of the patents-in-
5 suit.

6 15. Plaintiff is informed and believes that SCEA owns, operates, advertises, controls,
7 sells, and otherwise provides hardware, software and websites for “online game and video
8 services” including via the Sony Playstation 3 (“the SCEA device”) and Sony Playstation Store
9 (“the SCEA service”), both available through www.playstation.com. Upon information and
10 belief, SCEA has infringed and continues to infringe one or more claims of the '585 patent by
11 making, using, providing, offering to sell, and selling (directly or through intermediaries), in this
12 district and elsewhere in the United States, systems and methods for purchasing products and
13 services and processing corresponding financial transactions, including via the SCEA service and
14 SCEA device. Upon information and belief, SCEA has infringed and continues to infringe one or
15 more claims of the '400 patent by making, using, providing, offering to sell, and selling (directly
16 or through intermediaries), in this district and elsewhere in the United States, systems and
17 methods for remotely selecting and receiving desired programming selections, including via the
18 SCEA service and SCEA device. More particularly, Plaintiff is informed and believes that SCEA
19 has and/or requires and/or directs users to access and/or view and/or purchase products from a
20 remote programming system at the Playstation Store via a Playstation 3 remote receiver device in
21 a manner claimed in the patents-in-suit. Upon information and belief, SCEA has also contributed
22 to the infringement of one or more claims of the patents-in-suit by providing to users, in this
23 district and elsewhere in the United States via the SCEA service and the SCEA device, software
24 only useful for permitting users to purchase products and services from a plurality of available
25 products and service and for processing corresponding financial transactions in real-time in a
26 manner claimed by one or more claims of the patents-in-suit.

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1 16. Plaintiff is informed and believes that Valve owns, operates, advertises, controls,
2 sells, and otherwise provides software and websites for “online game services” including via the
3 Valve Steam client (“the Valve software”) and Steam Store (“the Valve website”), both available
4 through www.steampowered.com. Upon information and belief, Valve has infringed and
5 continues to infringe one or more claims of the ’585 patent by making, using, providing, offering
6 to sell, and selling (directly or through intermediaries), in this district and elsewhere in the United
7 States, systems and methods for purchasing products and services and processing corresponding
8 financial transactions, including via the Valve website and Valve software. More particularly,
9 Plaintiff is informed and believes that Valve has and/or requires and/or directs users to access
10 and/or view and/or purchase products from a remote programming system at the Steam Store via
11 a Steam software client in a manner claimed in the ’585 patent. Upon information and belief,
12 Valve has also contributed to the infringement of one or more claims of the ’585 patent by
13 providing to users, in this district and elsewhere in the United States via the Valve website,
14 software only useful for permitting users to purchase products and services from a plurality of
15 available products and service and for processing corresponding financial transactions in real-
16 time in a manner claimed by one or more claims of the ’585 patent.

17 17. Each Defendant’s aforesaid activities have been without authority and/or license
18 from Plaintiff.

19 18. Plaintiff is entitled to recover from the Defendants the damages sustained by
20 Plaintiff as a result of the Defendants’ wrongful acts in an amount subject to proof at trial, which,
21 by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this
22 Court under 35 U.S.C. § 284.

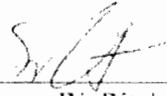
23 19. Defendants’ infringement of Plaintiff’s exclusive rights under the ’585 patent and
24 the ’400 patent will continue to damage Plaintiff, causing irreparable harm for which there is no
25 adequate remedy at law, unless enjoined by this Court.

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E. That this Court declare this to be an exceptional case and award Plaintiff its reasonable attorneys' fees and costs in accordance with 35 U.S.C. §285; and
F. Any further relief that this Court deems just and proper.

Respectfully submitted,
WHITE FIELD, INC.



Dated: November 18, 2010

Steven W. Ritcheson,
Attorney for Plaintiff
Olympic Developments AG, LLC

Exhibit A

United States Patent No. 5,475,585



US00547558

United States Patent [19]

[11] Patent Number: **5,475,585**

Bush

[45] Date of Patent: **Dec. 12, 1995**

[54] TRANSACTIONAL PROCESSING SYSTEM

OTHER PUBLICATIONS

[76] Inventor: **Thomas A. Bush**, 310 E. 85th St. Apt. 40, New York, N.Y. 10028

"Touchcom Interactive Video Disc Catalog" *News and Notes Video Disc*, Oct. 1985 vol. 5 No. 5 pp. 343-345.

[21] Appl. No.: **191,143**

"Setting up Shop on Computer Screens" *Nation's Business* Mar. 1984, pp. 57-58.

[22] Filed: **Feb. 2, 1994**

IBM Technical Disclosure Bulletin, vol. 25, No. 11B, Apr. 1983, New York US, pp. 5892-5893.

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Questions and Answers About Pay TV, Ira Kamen, Howard W. Sams & Co. 1983, pp. 103-106, Chapters 4-7.

[63] Continuation of Ser. No. 591,380, Oct. 1, 1990, abandoned.

"Pay to View as You Fly", David Lachenbruch, *Radio-Electronics*, Dec., 1989.

[51] Int. Cl.⁶ **G06F 153/00**

"New Concepts of Addressability," *PayPerViews*, pp. 10-14, Dec., 1989.

[52] U.S. Cl. **364/401; 364/403; 364/407**

"Audio Response Units", *PayPerViews*, pp. 19-22, Sep. 1989.

[58] Field of Search **364/401, 403, 364/408, 407; 358/84; 235/380, 492**

"The PPV Billing Challenge is Keeping It Simple While Obtaining Valuable Marketing Information", *Cablevision*, at 49, Jan. 15, 1990.

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"The Application of National ANI to Pay-Per-View Ordering", Thomas Neville, *NCTA Technical Papers*, 1988.

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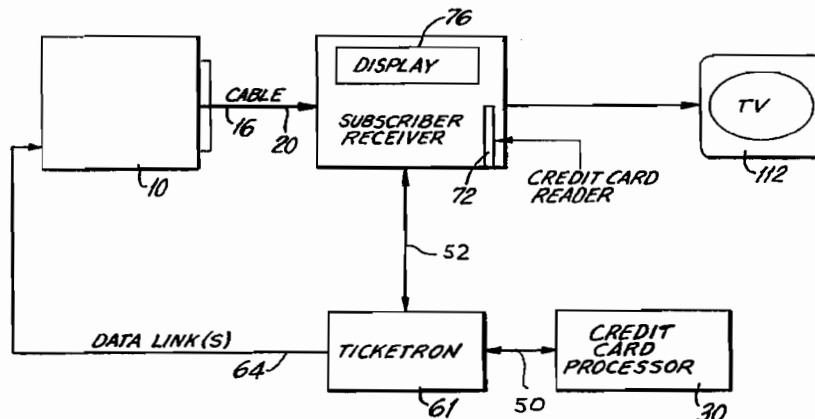
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4,359,631	11/1982	Lockwood et al.	235/381
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27 Claims, 10 Drawing Sheets



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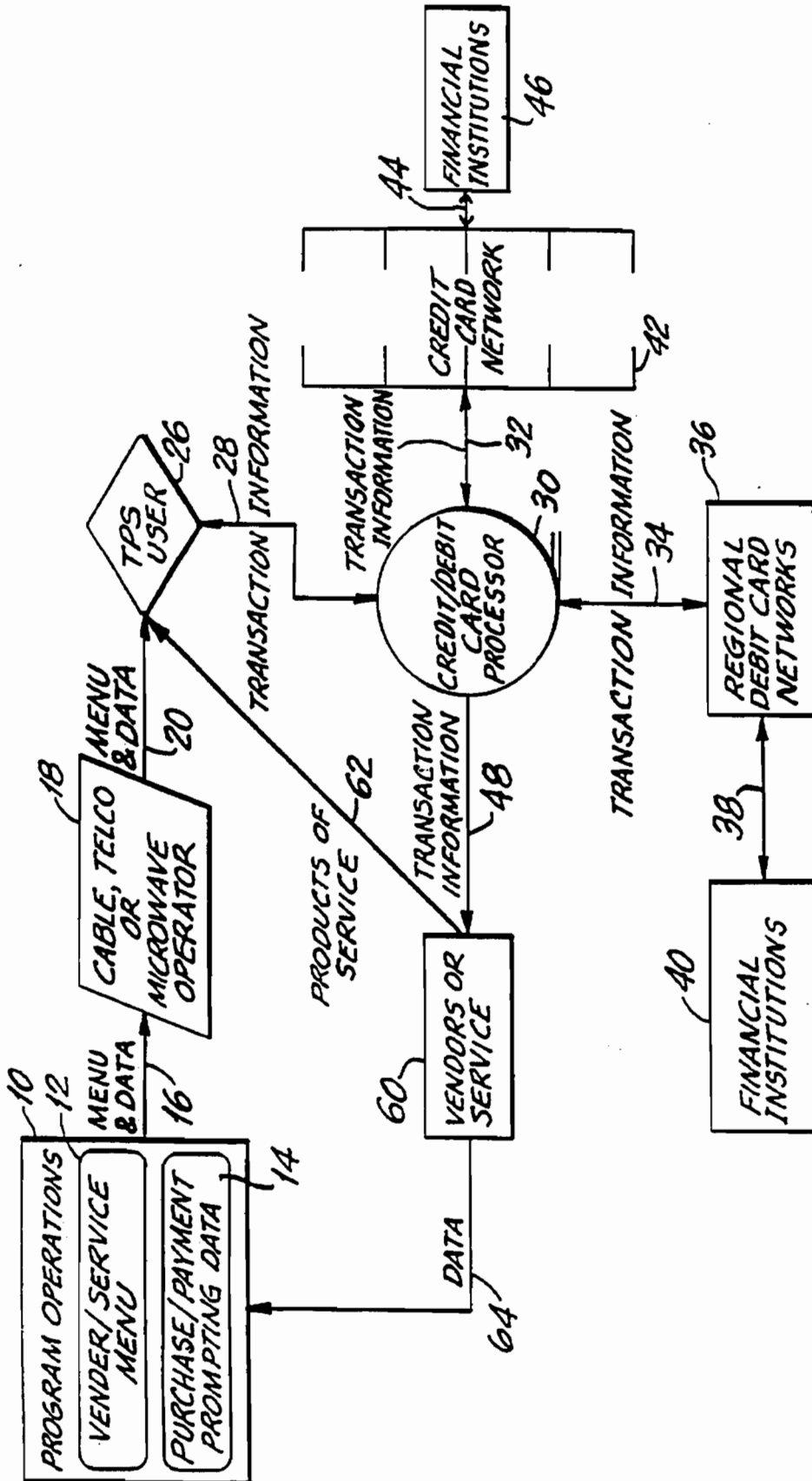


FIG. 1A

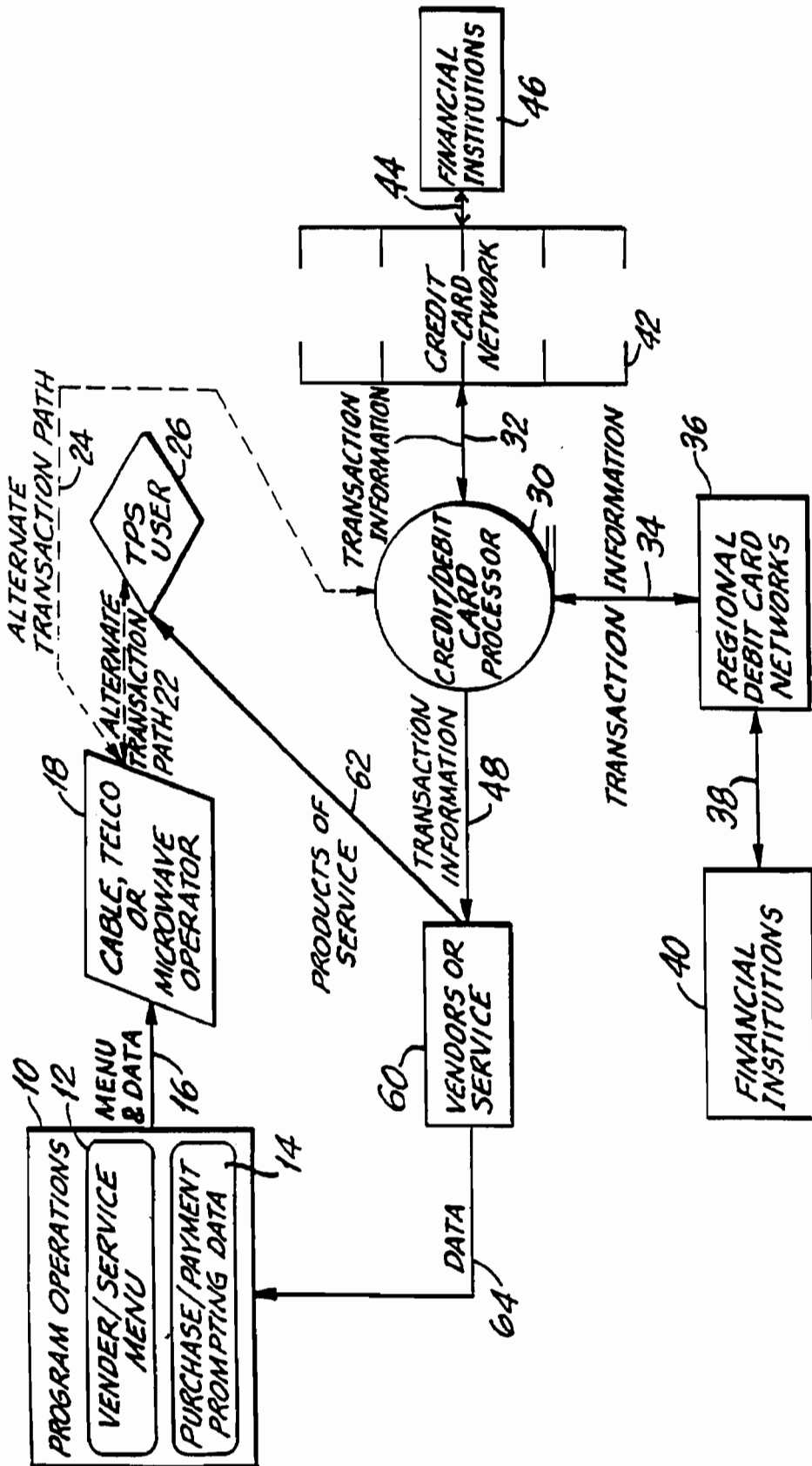


FIG. 1B

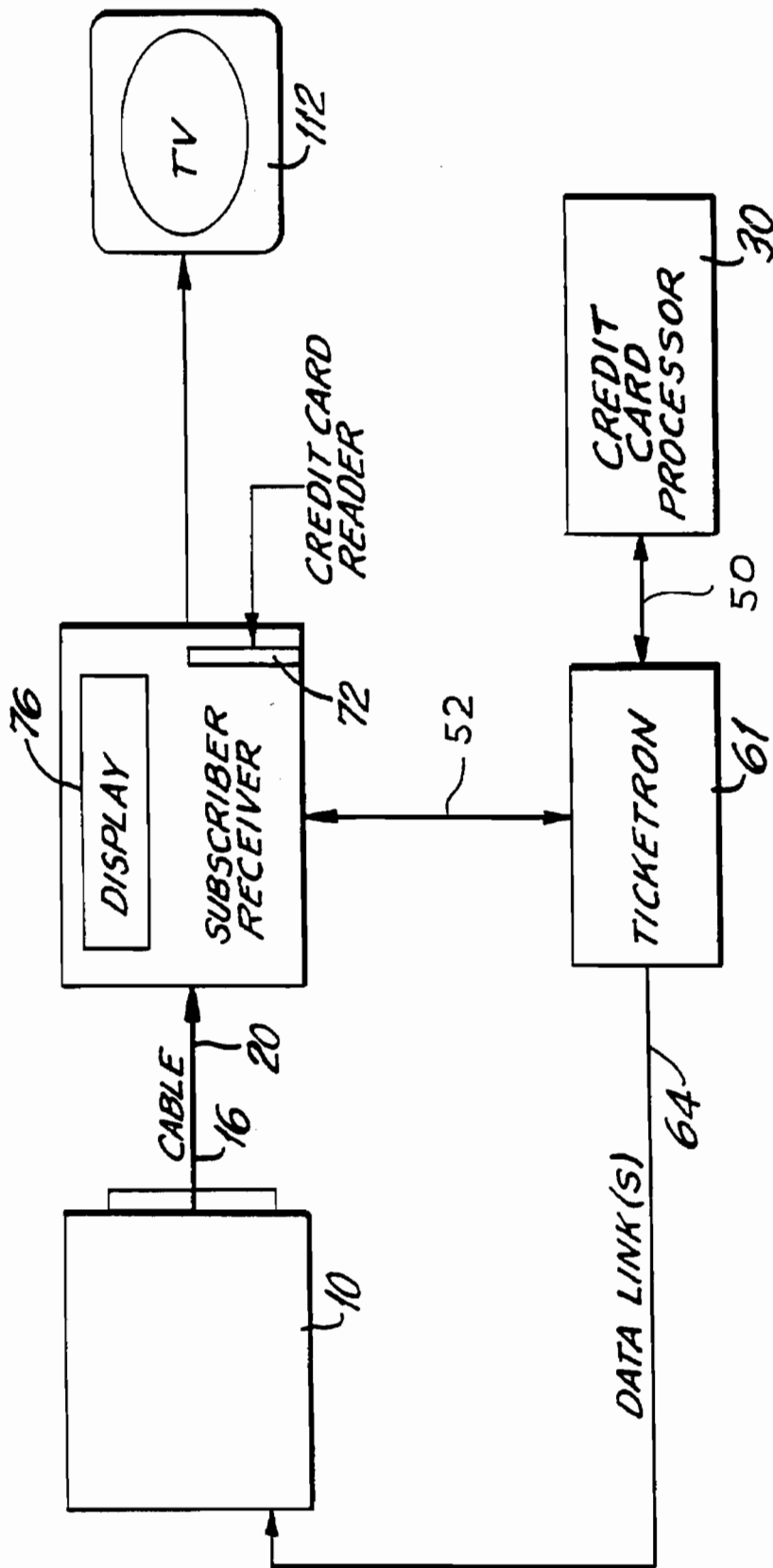


FIG. 2

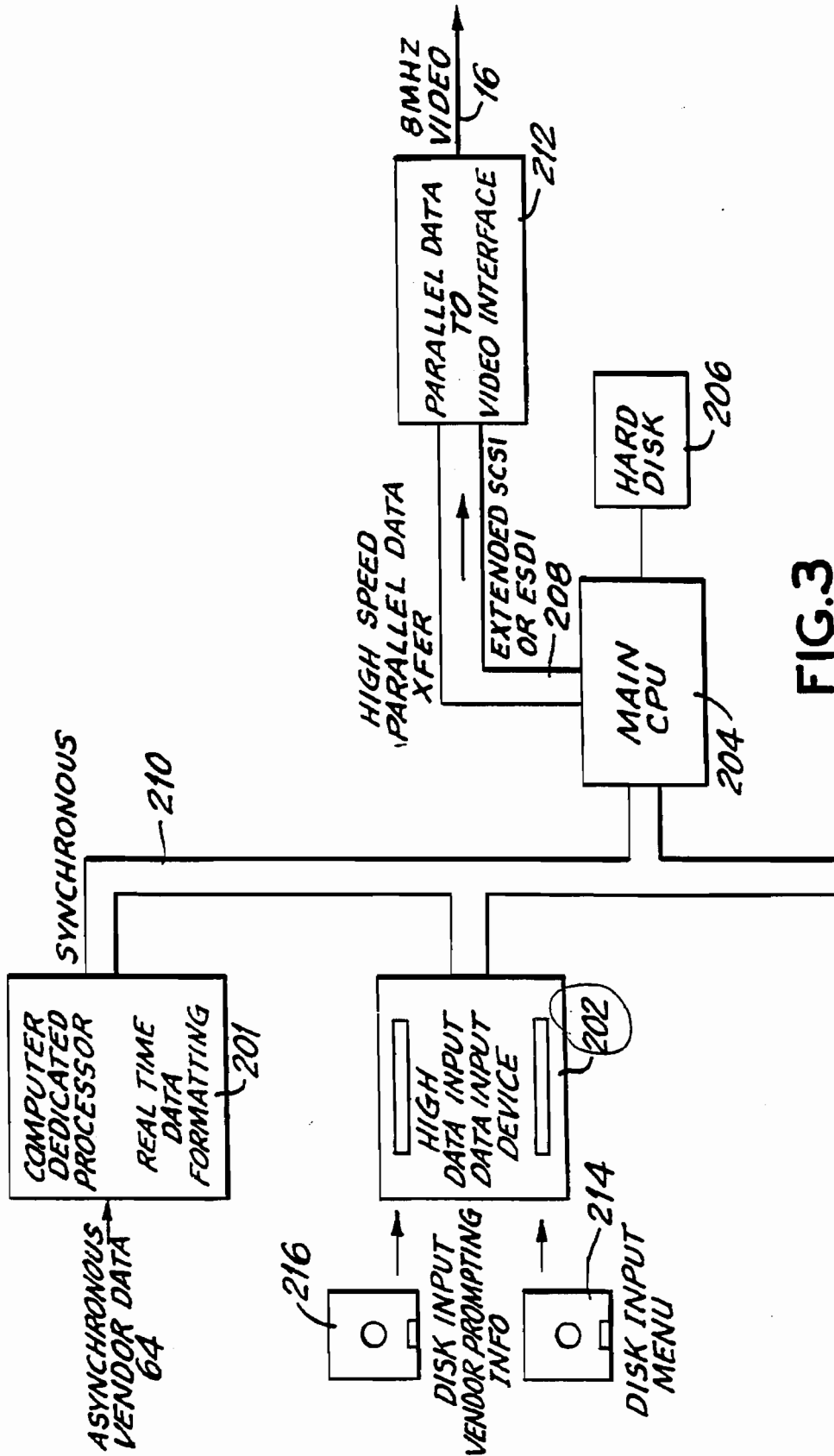


FIG. 3

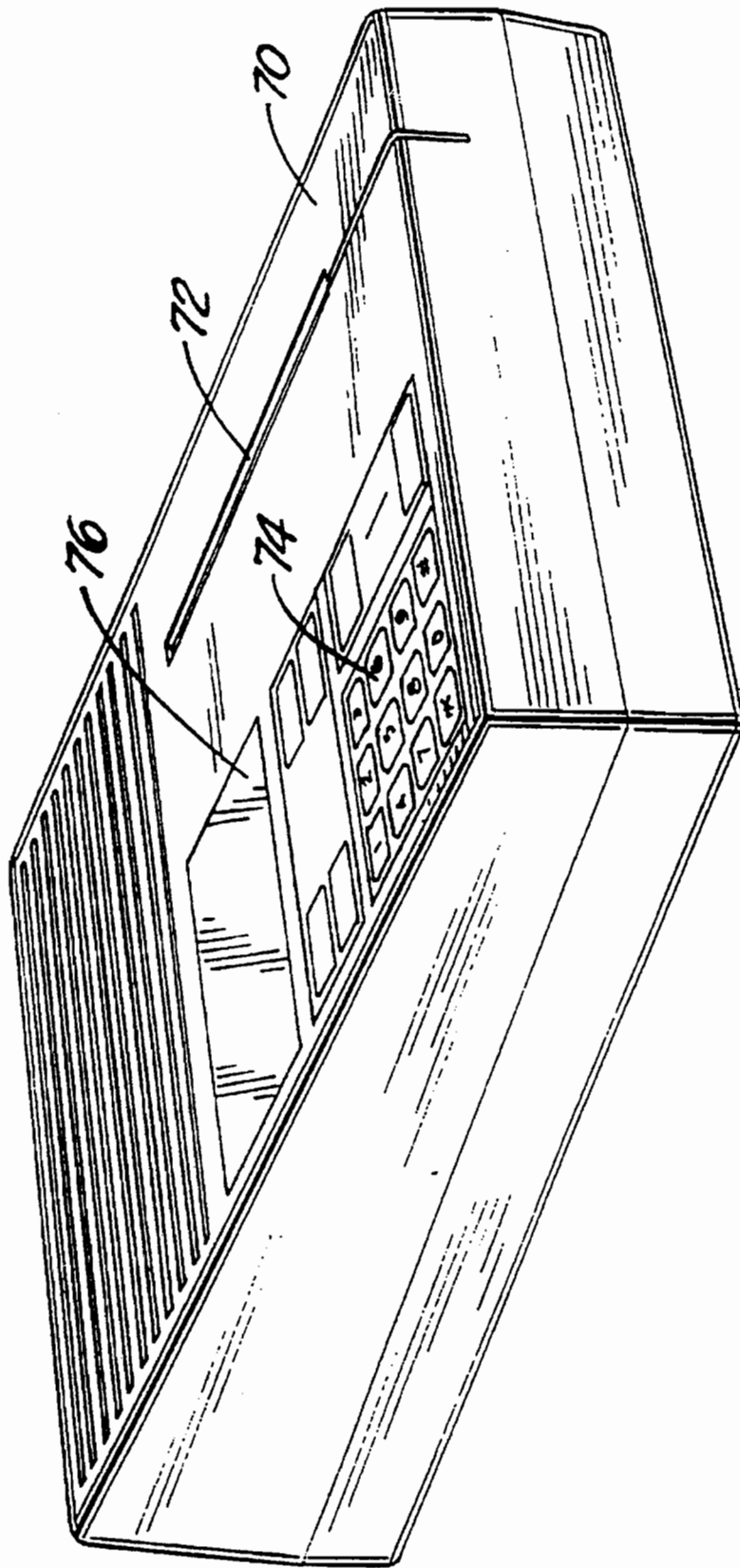


FIG.4

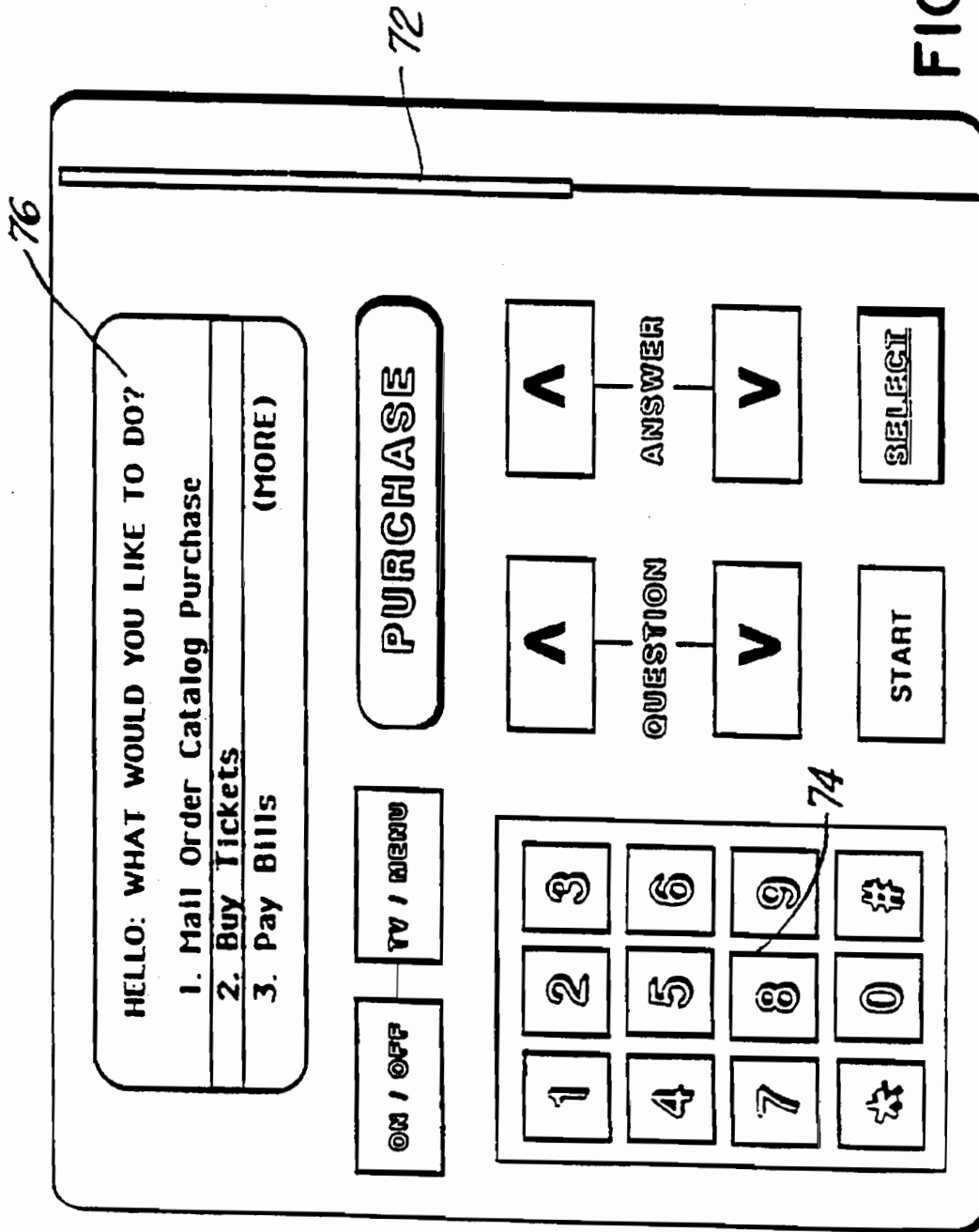


FIG. 5

TPS RECEIVER INSTALLATION
CUSTOMERS' HOUSEHOLD

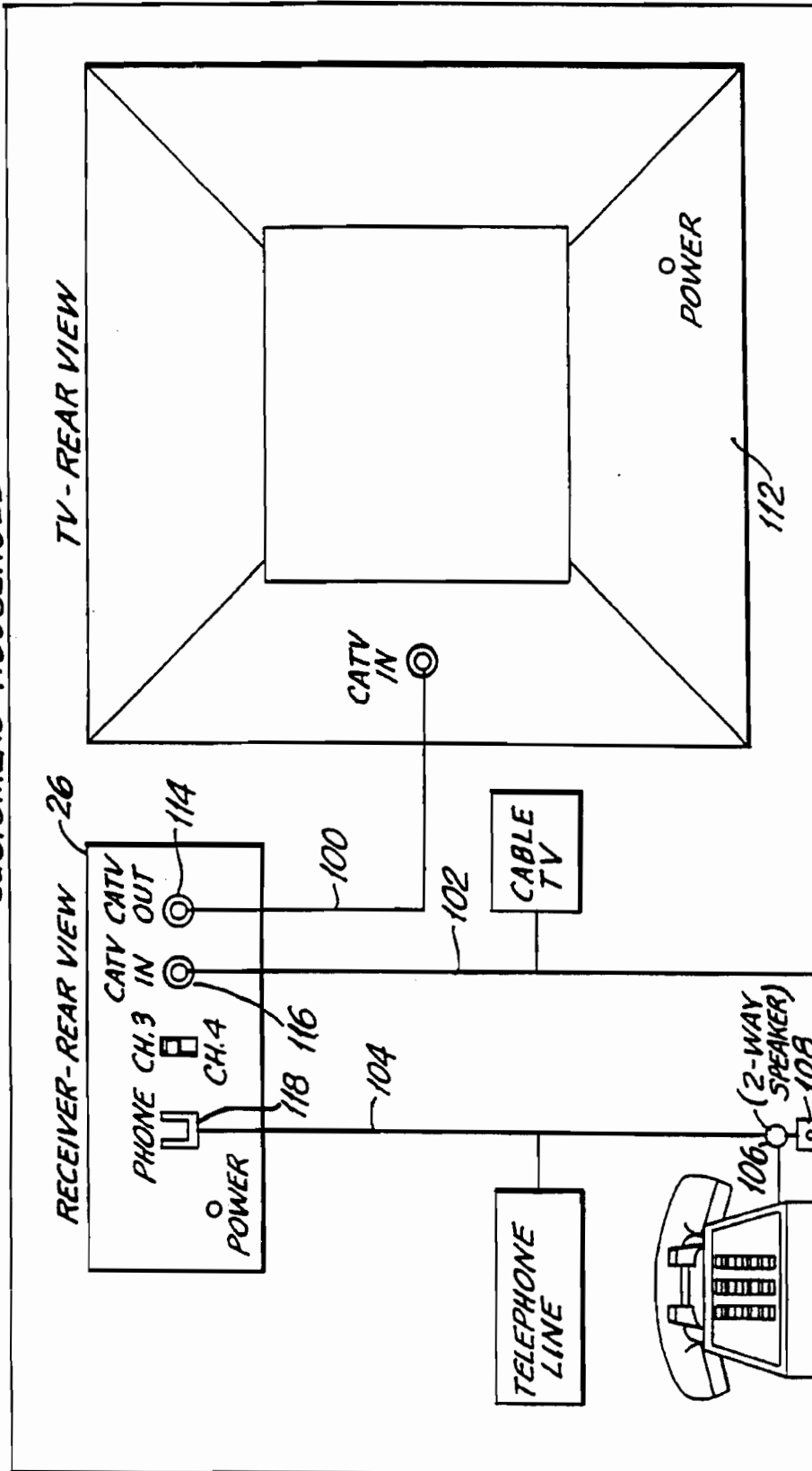


FIG.6

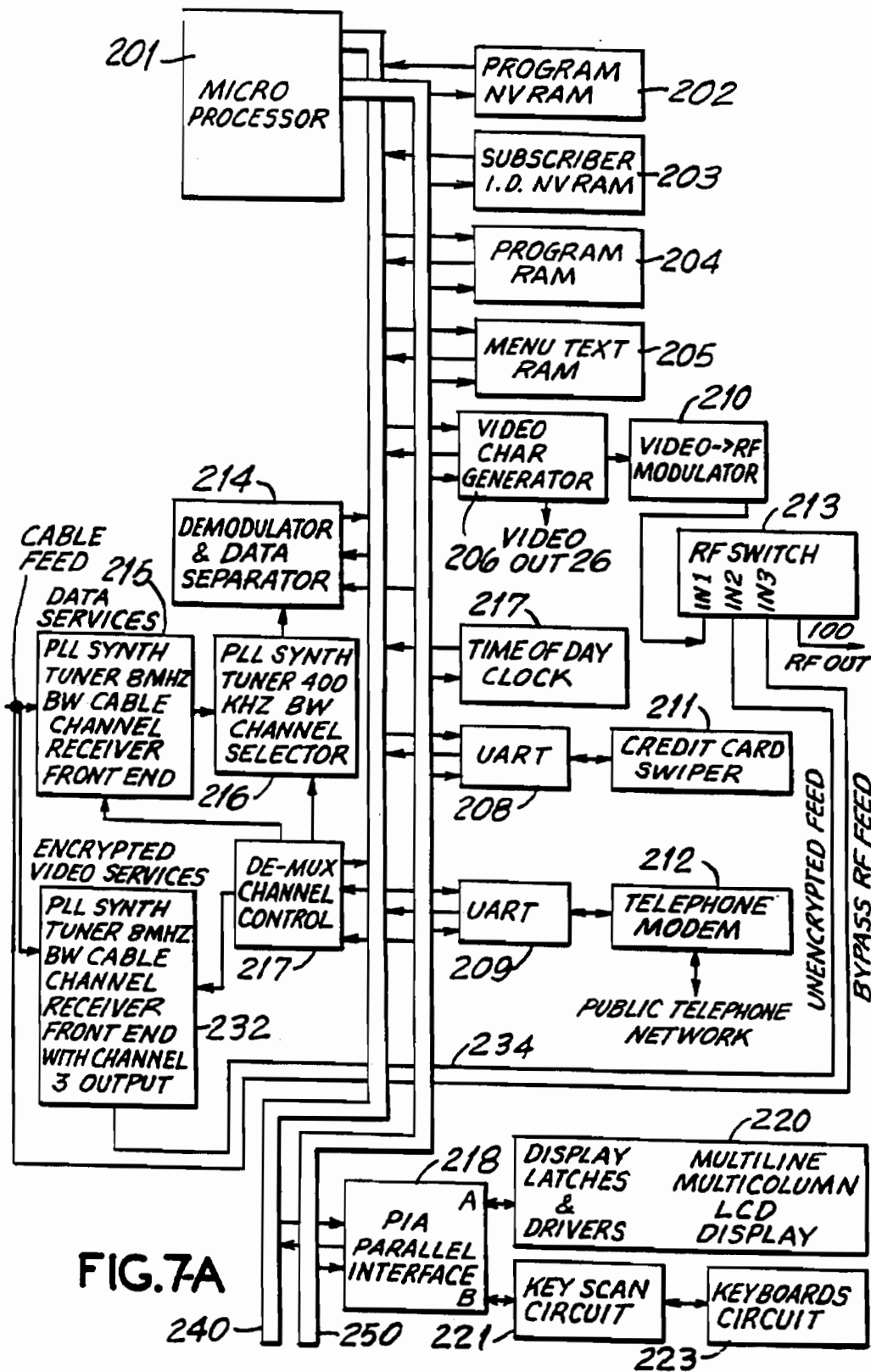


FIG. 7A

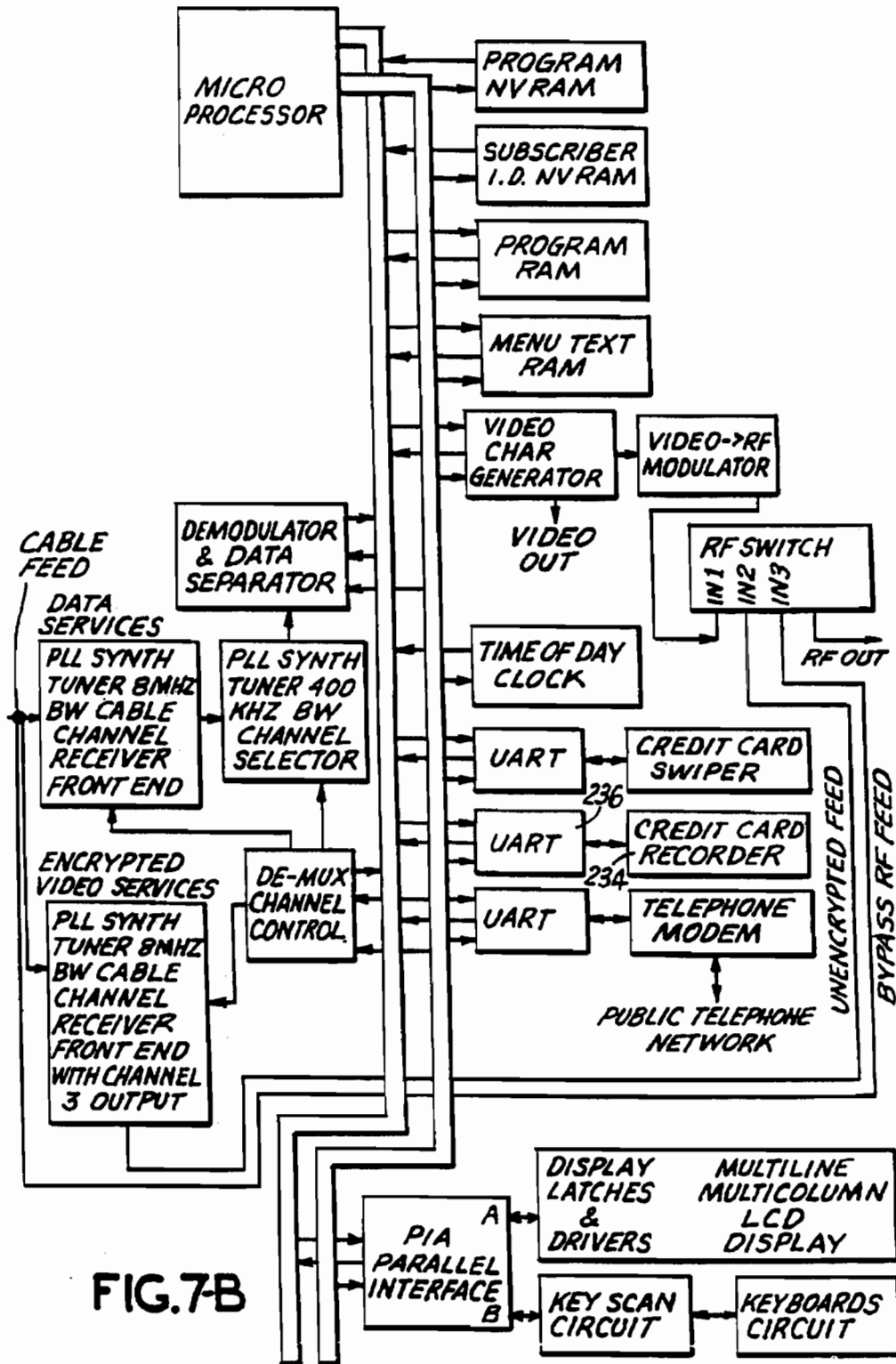


FIG. 7-B

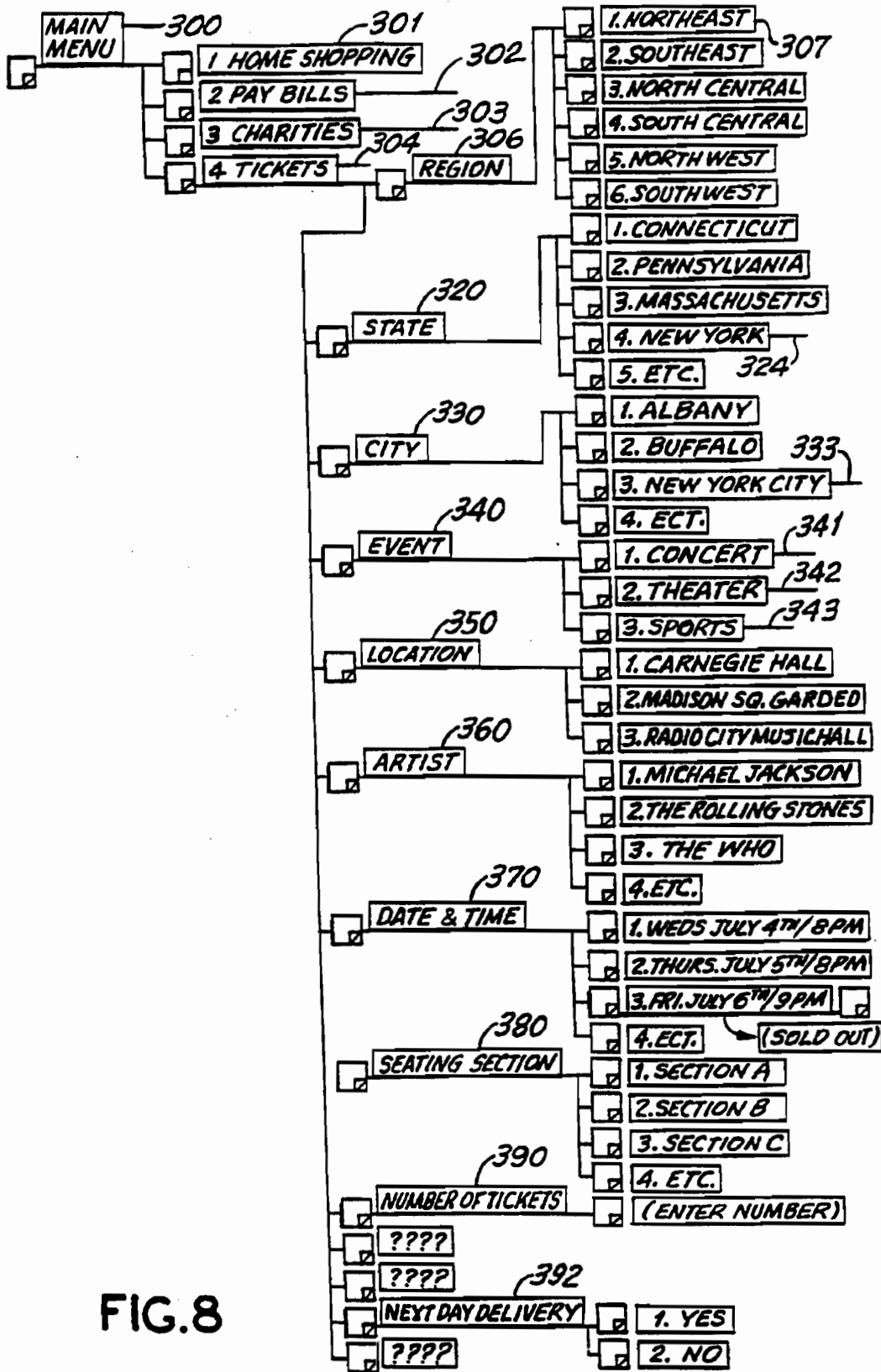


FIG. 8

TRANSACTIONAL PROCESSING SYSTEM

This is a continuation of application Ser. No. 07/591,380, filed on Oct. 1, 1990 now abandoned.

BACKGROUND OF THE INVENTION

The advent of Cable transmission has opened up an extensive network of pay-per-selection markets to the consumer. A complete array of visual and audio entertainments from movies to live and pre-recorded concerts and sporting events can now be brought directly into the consumer's home. Additionally, the cable viewer has access to a variety of goods and services via several shopping channels.

Presently, the home market is restricted by the amount of time required to complete a pay-per-selection transaction. If an individual desires to purchase a good or a service, he or she must first contact the system operator, place the order, and then provide the operator with credit card information. The operator, in turn, must then contact the consumer's financial institution to verify the billing information provided by the consumer. Once the system operator has been assured of receiving payment for the desired goods or services, then the consumer can receive the chosen goods or services. Due to the interaction between the consumer and the operator, efficiency of the system would be degraded and a resulting built-in capacity would limit the number of transactions.

Alternatively, the operator can merely collect billing information and process it in a batch method at selected intervals. Although this method is faster than clearing each transaction individually, the operator will be exposed to a certain number of uncollectible transactions.

Accordingly, there exists a need for a transactional processing system which would allow for efficient, real-time authorization of consumer transaction for a wide variety of services and products.

SUMMARY OF THE INVENTION

With the foregoing in mind it is an object of this invention to provide a new and improved real-time transactional processing system.

It is a further object of this invention to provide a non-interactive system where providing merchandise or services would be both convenient for the consumer and reliable for the retailer.

It is still a further object of this invention to provide a convenient billing process where the need for mailing bills or for interacting with a service operator is removed.

It is still another object of this invention to provide a real-time credit authorization, thereby assuring payment on every transaction and eliminating batch or interactive billing processes with the vendor or service provider.

The present invention comprises a transmitting source, a receiver and a transaction processor. The Source broadcasts one or many menus over a transmission channel, e.g., a T.V. cable channel. The consumer would have a wide variety of options to choose from the menu, depending on the available services provided by the source. The menu received by the customer could list many different products or services available to pay for, for example; (1) paying for cable bill; (2) paying utility bills; (3) paying bills for merchandise purchased; (4) purchasing entertainment, concert or sporting event tickets; (6) purchasing from any mail order catalog; (7) donating to fund raising events.

The system's receiver is in communication with the transmitting source and is also linked to a transaction processor. The transaction processor, verifies the consumer's financial data, authorizes the proposed transaction and enables the consumer to complete the desired transaction.

The receiver is equipped with a card reader for, by way of example, a bank issued credit or debit card, to enable the receiver to obtain and transmit information about an individual's account to the transaction processor. The consumer selects an item from the menu, and the receiver then transmits the information corresponding to that selection, as well as consumer's financial account information, to the transaction processor via a modem. The transaction processor then verifies the consumer's financial information, and provides real-time authorization of payment for the selection. Next, the transaction processor (if not a financial institution) would transmit a payment authorization signal to a financial institution. The financial institution in turn pays the retailer. The retailer could then send the consumer, the ordered product or service, or a receipt for the paid bill.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1(A) is a block diagram of Transactional Processing System (TPS);

FIG. 1(B) is block diagram of an alternate embodiment of Transactional Processing System;

FIG. 2 is a block diagram of a TPS for real-time services requiring continuous update.

FIG. 3 is a block diagram of a TPS transmission system.

FIG. 4 is a diagram of Transactional Processing System key-box.

FIG. 5 is a top view diagram of Transactional Processing System receiver.

FIG. 6 is a diagram of receiver installation.

FIG. 7A is a block diagram of the operation of Transactional Processing System receiver.

FIG. 7B is a block diagram of the operation of Transactional Processing System receiver with a credit card recorder option.

FIG. 8. is a flow chart of interaction between consumer and a typical menu.

DETAILED DESCRIPTION OF THE INVENTION

Referring now to the drawings in which like numeral represent like components, FIG. 1. illustrates a block diagram of Transactional Processing System (TPS). A Transmitting source 10 would broadcast a signal representing a menu. In the preferred embodiment this signal is video. The transmitting source 10, therefore, broadcasts one or many video menus, offering the consumer the option to pay for either a product or a service. The menu information 12 contains the picture or graphic information corresponding to vendors and services available in the system. The menu information could be broadcasted through a transmission channel 16 to a receiver 18 typically operated by a cable, telephone company, microwave ,TVRO or DBS operator. In a preferred embodiment described herein, cable operator 18 would in turn transmit information to receivers 26 within its broadcast area, through transmission channel 20. Transmission channel 16 can be a full video channel or a narrow band channel through a satellite uplink-downlink.

The menu information 12 could be an aggregate of many pictures corresponding to various products or services combined into one full video signal and demodulated into narrow band information, whereby the TPS receiver would allow the customer to choose from many different menus without the cable operator 18 giving up a wide band or prime video channel.

In addition to menu information 12, the transmitting source 10, would also broadcast prompting data 14, which represent the necessary information to electronically prompt a subscriber through the process of purchasing an item via a mail order catalog or paying for a selected service. Once the vendor or service is selected the prompting data for each vendor or service would be downloaded into a RAM within the receiver 26. The prompting information for each vendor or service could then be displayed on an LCD within the receiver 26 or in a television set connected to the receiver 26. It is also possible to combine both the picture and prompting data information and transmit the combination to receiver 26.

The user at receiver 26, makes a menu selection and answers the questions or prompts, pertinent to the selected vendor or service. The user then wipes a credit/debit card through receiver 26 which allows the credit/debit card to be authorized and a purchase or payment be made. The card information would be transmitted from receiver 26 to transaction processor 30 via transmission channel 28. Typically receiver 26 would transmit the user selection and the financial account information via a modem, through a telephone line to transaction processor 30. The transaction processor 30 would then verify the user's financial account. This includes verifying whether the consumer does in fact have the requisite sum available in the chosen account to pay for the selection made.

In the event that the consumer has used a credit card, the transaction processor 30 would then forward the verified information to a regional credit card network 42, through transmission channel 32. This information would be then forwarded to a participating financial institution 46, through transmission channel 44. The financial institution 46 would in turn pay the vendor or service provider 60, and the consumer would receive a bill or receipt for that particular transaction. Similarly, in the event that the consumer has used a debit card, the transaction processor 30, would then forward the verified information to a regional debit card network 36, through transmission channel 38. This information would be then forwarded to a participating financial institution 40, through transmission channel 38.

The transaction information would be also transmitted from transaction processor 30 to vendor or service provider 60, via transmission channel 48. Vendor or service provider 60 would then in turn provide the service or the goods purchased to the user via appropriate channels. Vendor or Service provider 60 could also send purchasing data to transmitting source 10 via transmitting channel 64 for upgrading service and product information, product availability, price change, products purchased and various other information.

There are various scenarios in which a transaction information could be verified. For example, in order for the consumer to be assured that the selected product or service can be delivered on a specific desired terms the transaction processor 30 would cross check the transaction information transmitted through channel 28 with the corresponding vendor or service database. Once that transaction has been cross-checked, the credit card processor 30 would send the

authorization signal. Alternatively the vendor/service provider 60 may update its corresponding database and transmit such updated information to transmitting source 10. Transmitting source 10 would then change the menu 12 and prompting data 14 and continuously broadcast the updated information to receivers 26. Actual cross-check before authorization could be made locally in receiver 26. Hence customer's selection would be compared with updated information broadcasted to receiver 26 for product verification purposes.

FIG. 1B depicts an alternate communication path for transaction authorization. When cable operator 18 requires to monitor all transaction interactions the consumer through receiver 26 would make a selection. The information representing such selected service or product would be transmitted to cable operator 18 via transmission channel 22. Cable operator 18 after receiving the transaction information would retransmit such information to transaction processor 30 via transmission channel 24. Thereafter the transaction verification would proceed as discussed before.

There are, however, situations when up to the minute information is critical to the consumer and the retailer. A typical scenario is providing a limited product or service to a pool of consumers. This includes tickets for a performance or a sporting event. Since the available seats are very limited it would become impractical to update the database by service provider 60, transmit that database to source 10, and retransmit that information to receiver 26 for verification purposes.

An alternate communication path as depicted in FIG. 2 could thus be established, wherein TPS user through a series of prompts would select the desired event. The information representing the user's choice would be transmitted to a ticket provider 61 like Ticketron, via transmission channel 52. The Ticket provider 61 contains a database wherein available seats are continuously updated and the desired selection would be cross-checked against that database. If desired seat is available, the Ticket provider 61 would transmit the transaction information to transaction processor 30 via transmission channel 50 for credit authorization. Once the credit is authorized as described hereinabove, the credit processor would transmit the verification signal to ticket provider 61, wherein the database contained therein would be updated and a confirmation message would be transmitted to the receiver 26 via transmission channel 52. The ticket provider 61 would transmit updated event availability and other pertinent information to source 10 through transmission channel 64.

FIG. 3 shows the block diagram of transmitting source 10, wherein all the pertinent information for system's operation is programmed and accordingly transmitted to receivers 26. Vendor or service provider's data can be transferred to the transmitting source 10, either through asynchronous communication or by hard copy data like computer disk storage. In FIG. 3, the high capacity data input device 202, has the ability to load menu (picture or graphics) and prompting data information via external disk storage devices 214 and 216. Alternatively, both the video and prompting information could be combined and fed into the data input device 202 together. Various vendors who do not maintain an in-house database, could periodically update their product information and send the updated information to TPS programmer, in the form of computer disks 214 and 216. That information would be then transferred to the Main CPU 204, which controls the overall data formatting, and transmits the formatted data to parallel data to video interface 212.

In situations where the vendor or the service provider

maintains a database for updating the product information, transmitting source 10 would be connected to that database via communications channel 64. The high speed vendors' or service providers' data would then be transmitted asynchronously from corresponding databases to computer dedicated processor 201. That information would be buffered within processor 201. The processor 201 would then perform packet formatting and output this data in a synchronous manner that is polled by the main CPU 204.

The main CPU 204, would perform time multiplexing to gather data belonging to various vendors and service providers. The data along with the formatted menu, prompting data and other housekeeping information will be time multiplexed and assembled by the main CPU 204 for transmission over the parallel bus to the parallel data to video interface 212. The video interface 212, converts the digital data into video format for transmission to receivers 26. In the embodiment mentioned herein, video interface 212, is model 17480, by Quantel.

Hard disk 206 stores all the necessary information for the transmitting source 10. Data from main CPU 204 to video interface 212, is transmitted via an extended SCSI or ESDI, as commonly known in the art.

FIG. 4, depicts a side elevation of receiver 26 wherein slot 72 provides the space for wiping the credit or debit card. Display 76 allows for the user to page through the menus and their corresponding prompts. Keyboard 74 allows for various control functions.

FIG. 5, depicts the top view of receiver 26, wherein a sample menu on display 76 has been shown. TPS user by pressing appropriate buttons may page through various prompts and answer them accordingly for a desired product or a service.

FIG. 6, depicts TPS receiver 26 installation diagram. Line 102 carries the information signals from cable operator to receiver 26 through cable-in jack 116. Various signal processing functions as will be discussed hereinafter would be conducted on the information signals. The menu and prompting information would then be transmitted to TV set 112 through line 100. Phone line 104 sends the transaction information to telephone company line through jack 108. 2-way splitter 106 allows for both the telephone set 110 and receiver 26 use the same phone line accordingly.

The actual data processing within receiver 26 will be next explained based on the block diagram depicted in FIG. 7A. Receiver 26 would decode the data transmitted into cable feed 116. This data may contain menu and prompting information for various vendors or service providers. Microprocessor 201 controls all the functions of receiver 26. Menu and prompt information are initially encoded into multiple subchannels and all the multiple subchannels are encoded into one cable channel with 8 MHz bandwidth. Phased Locked Loop (PLL) synthesized tuner 215 selects the initial cable channel which would contain all the various subchannels. Phased Locked Loop synthesized tuner 216 outputs an intermediate carrier frequency which has the selected subchannel encoded on to it, wherein the desired menu and prompting information are contained. TPS user by pressing the desired selection would prompt microprocessor 201 to send the proper information to channel control 217. Channel control 217 will in respond send the data for setting the demodulating frequency in tuners 215 and 216, corresponding to the desired menu and prompt information.

Demodulator data separator 214 takes the RF channel that was selected by tuners 215 and 216 and steps down the carrier frequency and separates the desired data from the

carrier frequency. The demodulated data would be then presented in parallel format onto the CPU bus 240, for transfer through microprocessor 201 to menu text ram memory 205. Encoded indexing data would be presented to microprocessor 201, in demodulated packets of data, that would be used as cues for the various types of menuing data, under program control, so that appropriate menus and text would be placed in the correct memory in the desired sequence and location.

Memory 202 is a non volatile read and write memory (NVRAM) which contains all of the main program instructions for operating receiver 26. NVRAM 203 would contain a unique subscriber I.D. Subscriber I.D. could be electrically erasable and therefore it could be remotely programmed with a unique I.D. number.

RAM 204 is just a scratch pad memory for use by the microprocessor 201 for conducting various calculations and memory moves that are necessary in operating the receiver.

Menu text RAM 205, is a paged RAM for storing individual pages of display text memory which can then be accessed, a page at a time and dumped out into the video character generator 206 which would probably have a single page of RAM. Menu text RAM 205 would hold as many pages as necessary for the system.

Video character generator 206, would take individual pages of RAM loaded in menu text RAM 205, and then transmit the information in the form of video signal, into line 226 which is a direct video output. Video character generator 206 may also transmit video information to video RF modulator 210 which in turn feeds the information into RF switch 213. RF switch 213 selects the proper input and feeds the video information through line 100 into the television receiver 112. The menu and data information would, thereby, be displayed on the television 112 display.

Block 207 represents the time of day clock for any real time actions that the microprocessor requires for proper operation of the system. Time of day clock is of importance when the service provided is an event that is broadcasted through the cable to authorized receivers only. The consumer can select a desired program to view at a specific time of the day. The transmitting source 10, continuously sends the scheduling information and the choice of programs available to view. The receiver 26, would then cross-check the actual time and date of the desired transaction with the database being sent by transmitter source 10. Once the actual transaction is verified, the financial information would be sent to transaction processor 30, for payment authorization. Upon approval, microprocessor 201, would send the appropriate signals to channel control 217, at the desired time and date, which in turn transmits the appropriate tuning codes to PLL synth tuner, for tuning to the encrypted signal that carries the desired program. PLL tuner 232 is typically tunable to a 8 MHz cable channel, acting as a receiver front end with channel 3 output. The output of PLL tuner 232, sends an unencrypted signal via line 234 to RF switch 213, wherein the signal representing the desired program would be sent to the T.V. set through RF output of RF switch 213.

A UART 208 is connected to a credit card swiper for taking information in from a credit card. The data received from credit card, would then be verified by microprocessor 201 and or transmitted through UART 209 and modem 212 to transaction processor 30 via the public telephone network for credit card verification and charge.

Programmable peripheral interface (Parallel Interface) 218, is a dual 8 bit parallel port with a defined bus address. Port A of 218 drives an 8 bit addressable multi-line multi-

column LCD Display with internal display drivers 220. Key Scan circuit 221 and Keyboard circuit 223, generate appropriate signals upon depression of keyboard buttons 74. The generated signals are then presented to port B of parallel interface 218.

The channel selection is done by TPS user by pressing the appropriate selection on keyboard 74. The appropriate vendor or service whose information is encoded into a specific channel would correlate to the key depressed by the TPS user. The microprocessor 201 would then load the proper control codes into channel control 217 for selecting the channel containing the corresponding desired menu and prompting data or encrypted video.

RF switch 213 is a 3 by 1 switch which could also bypass the cable feed directly to television 112 without processing the data. Video character generator 206 as stated above would also have a direct video out for users who would want to view the information at a high quality monitor instead of television sets. Microprocessor 201 can be a relatively simple 8 bit microprocessor with a high clock rate which would serve the needs of the system.

FIG. 7B is another TPS keypad schematic with an additional improvement for credit card recording. With the advent of smartcards, it is possible to store pertinent financial information of various institutions on a memory located on one smartcard only. It is possible to update the stored memory on said smartcards by connecting a smartcard recorder 234 to receiver 26, through UART 236. The information on the smartcard can be then remotely read or recorded via microprocessor 201 for updating purposes, and thereafter for transmitting the financial information, for the appropriate transaction. This additional option allows for a widespread use of smartcards, which up to now were hindered for lack of a proper and convenient method of updating the information stored in the cards.

FIG. 8. is an example of questions and answer prompts for ticket purchasing described herein above. The main menu contains various service or product selection. The TPS user would select prompts for purchasing a desired ticket. The prompt would change into more specific questions like region, state, city, event, location, artist, date & time, seating section number of tickets, next day delivery, etc. Every category would be subdivided into more specific questions whereby the user can select the precise event and schedule accordingly.

More specifically a typical menu as shown in FIG. 8 would first have a main menu display 300. The consumer by pressing a button could select one of many services available in the system. For purposes of example, this may include Home Shopping 301, or Paying Bills 302, or Charity donation 303, or Ticket Purchasing 304. Assuming that the consumer has selected the Ticket Purchasing option 304, the system then displays a variety of choices, including Region 306, State 320, City 330, Event 340, Location 350, Artist 360, Date & Time 370, Seating Section 380, Number of Tickets 390, and Next Day delivery 392.

The consumer can purchase tickets based upon the information shown on the display. For example the menu can prompt the consumer on the desired region in the country. Assuming that the consumer has selected Northeast region 307, the menu then inquires on the States located in that region. Upon selecting New York State 324 from the State 320 menu, the major cities in the selected State would be displayed. Assuming that New York City 333 is selected, then the available events in New York City would be displayed on event menu 340. The event could be concert

341, or Theater 342, or Sports 343. Depending on the event selected the corresponding location to that event would be then displayed on location menu 350. Once the consumer selects a desired location, the menu then displays various artists performing in the selected location, on display menu 360. The consumer then selects the desired artist, which in turn allows for the dates and times of the artist's performance be displayed on Date & Time menu 370. Since receiver 26 is directly communicating with Ticket provider's database, up to the minute information can be verified. Upon selecting the date and the time of the desired event, the Seating Section menu 380, then displays the available seating areas. Once the seating section is chosen, the Number Of Tickets menu 390 asks for the desired number of tickets. The next prompt would be delivery of the actual purchased tickets, which could be done by mail or at the theater counter.

The receiver 26 can be used for various purposes; purchasing products from various catalogs; obtaining instant ticket access; a media news channel whereby the viewer can access the channel by selecting the appropriate menu selection; ballot box, where a convenient 900 number voting service may be used, whereby the user by pressing a button on the menu would select a voting option on the video menu and receiver 26 would dial a 900 number for voting purposes; donation box, whereby a viewer by pressing appropriate menu selection and wiping the credit card off the receiver 26 may donate to a desired charity; software downloading where the user may rent or purchase a particular software broadcasted by transmitting source 10 and any other application. The software may include video games available for rent and eventual purchase. The consumer hence would be able to try a video game through receiver 26 and through appropriate downloaded software for operating the microprocessor 201 of FIG. 7A. The service provider could charge the consumer on a periodic basis; It is also possible to control receiver 26 by a remote controller with credit card reading ability, whereby the transaction information can be conducted remotely from the receiver 26. Video information can also be fed into a computer and hence allow a computer interaction with the system for various purposes within the scope of this invention.

While the invention has been described in its preferred embodiments, it is to be understood that the words which have been used are word of description, rather than limitation, and that changes may be made within the preview of the appended claim without departing from the scope and spirit of the invention.

I claim:

1. A transactional processing system for purchasing products and services from a plurality of available products and services and processing corresponding financial transactions in real-time comprising:

(a) a programming transmitter means for broadcasting and updating a plurality of transaction information sets associated with said plurality of available products and services via a first communication channel, said first communication channel having a plurality of subchannels, said subchannels each transmitting channel having a plurality of subchannels, said subchannels each transmitting a corresponding transaction information set in said first communication channel;

(b) a plurality of receiver means each serving one user for receiving in each receiver means the identical transaction information sets broadcast from said programming transmitter, each one of said receiver means including RAM storage means, and means for downloading and

storing within the RAM storage means a desired transaction information set from the broadcast information sets received within each of said receiver means and to select a desired transaction for purchasing a product and service associated with said selected transaction information set, each of said receiver means including means for transmitting financial information of the user; each of said receiver means including a processor, programmed instructions and stored information for acting on downloaded information, and means for generating signals to said processor for modifying the downloaded information based on the programmed instructions, stored information and the downloaded information;

- (c) means forming a second communication channel originating at said plurality of receiver means and through which the financial information of respective users which is processed at said receiver means is transmitted; and
- (d) transaction processor means coupled to said second communication channel for receiving the financial information of respective users generated at respective receiver means, said transaction processor including means for generating an authorization signal through said second communication channel to respective receiver means to authorize said desired transaction in real time for said selected products and services.

2. A system according to claim 1, wherein each one of said transaction information sets further comprise a plurality of prompting data corresponding to said products and services for prompting users to make a selection.

3. A system according to claim 2, wherein each one of said transaction information sets further comprise:

A plurality of graphic information corresponding to said available products and services.

4. A system according to claim 1, wherein said first communication channel further comprises:

(a) a satellite uplink/downlink transmission between said programming transmitter and one operator means for receiving and transmitting information; and

(b) a broadcast channel from said operator means to said receiver means.

5. A system according to claim 1, wherein said second communication channel is a telephone line.

6. A system according to claim 2, wherein said transaction processor before authorizing said desired transaction, verifies said financial information of said user and transmits an authorizing signal to a financial institution, said financial institution making payments to vendors or service providers.

7. A system according to claim 6, wherein said transaction processor further transmits transaction information to said vendors or service providers, allowing said vendors or service providers supply selected products or services.

8. A system according to claim 7, wherein said vendors or service providers transmit updated information on their product and service to said programming transmitter.

9. A system according to claim 2, wherein said receiver means further comprises a slot for wiping a credit card.

10. A system according to claim 3, wherein said receiver means is connected to a television set, said graphic information and said prompting data being displayed on said television set.

11. A system according to claim 2, wherein said receiver means comprises an LCD display means for displaying said prompting data.

12. A system according to claim 3, wherein said receiver

means comprises an output means for transmitting video signals representing said graphic information and prompting data to a video monitor.

13. A system according to claim 2, wherein said receiver means further comprises:

(a) a receiver microprocessor means for controlling various functions of said receiver means, said receiver microprocessor means connected to a data bus and to an address bus;

(b) a tuning and demodulating means for receiving and demodulating a channel containing selected graphic and prompt information, said demodulating means connected to said data bus and said address bus;

(c) a first memory means for storing a program for operating said receiver, said memory means connected to said data bus and said address bus;

(d) a second memory for storing said graphic and prompt information, said second memory means connected to data bus and said address bus;

(e) a video character generating means for converting said graphic and prompt information into video signals, said video character generating means connected to said data bus and said address bus;

(f) a first interface means for displaying said graphic and prompt information on an LCD display said first interface means connected to said data bus and said address bus;

(g) a second interface means for scanning a key pressed on said receiver, said second interface means connected to said data bus and said address bus;

(h) a third interface means for connecting a card swiper wherein card information from a credit or debit card can be read by swiping said card through said card swiper and said card information can in turn be fed into said third interface, said third interface connected to said data bus and said address bus; and

(i) a fourth interface means for connecting a telephone modem, wherein transaction information corresponding to a selected product or service can be transmitted by said modem from said receiver to said transaction processor, said modem receiving data from said fourth interface means, said fourth interface means connected to said data bus and said address bus.

14. A system according to claim 13 further comprising a smartcard interface means for connecting a smartcard recording means, for reading and writing information stored on a smartcard, said smartcard interface means connected to said data bus and said address bus.

15. A system according to claim 13, wherein said transmitting source further comprises:

(a) a transmitter microprocessor means providing data formatting, said data corresponding to a plurality of products and services available in the system from a plurality of vendors and service providers, said transmitter microprocessor means connected to a data bus;

(b) a dedicated processor means for receiving and buffering asynchronous data from said vendors and service providers, said dedicated processor performing packet formatting, and transmitting said data in a synchronous manner to said data bus, said transmitter microprocessor means polling said dedicated processor for accomplishing said synchronous data transmittal;

(c) a data input device means for loading graphic and prompting information corresponding to the plurality of vendors and service providers, via external memory

means, said data input device connected to said data bus for transmitting said information; and

(d) a parallel data to video interface means for receiving from said transmitter microprocessor means, data corresponding to said plurality of vendors and service providers, and converting said data into a video format appropriate for video transmission, said transmitter microprocessor means formatting said graphic and prompting data, and time multiplexing and assembling said data for transmission to said parallel data to video interface.

16. A system according to claim 15, wherein the service provided is an event that is broadcasted to authorized receivers, wherein:

(a) said transmitting source broadcasts scheduling information and choice of programs available for viewing;

(b) said receivers further comprising a time and date tracking means for maintaining the actual time and date, said receiver verifying a selected program and corresponding broadcast time and date of said selected program with said scheduling information, said receiver further sending appropriate signals at said broadcast time and date, for tuning to a signal that carries the selected program.

17. A system according to claim 4, wherein said second communication channel, comprises a transmission path between said user and said operator said user transmitting transaction information, said operator transmitting said transaction information to said transaction processor.

18. A transaction system for purchasing tickets and processing corresponding financial transaction in real-time comprising:

(a) a programming transmitter means for broadcasting updated prompting data corresponding to a plurality of performances and sporting events, via a first communication channel, said tickets available for said events;

(b) a plurality of receiver means each serving one user for receiving in each receiver means the identical prompting data broadcast via said first communication channel, each one of said receiver means including RAM storage means and means for downloading and storing within the RAM storage means said prompting data for allowing users to select tickets for a desired event, each of said receiver means including means for transmitting desired ticket information and financial information of said user; each of said receiver means including a processor, programmed instructions and stored information for acting on downloaded information, and means for generating signals to said processor for modifying the downloaded information based on the programmed instructions, stored information and the downloaded information,

(c) means for forming a second communication channel originating at said plurality of receiver means and through which the compiled ticket is transmitted;

(d) a database means coupled to said second communication means and containing information on available seats and events, said database means receiving the desired ticket information and said financial information transmitted by said receiver means and transmitted through said second communications channel, said database means verifying said transaction information;

(e) a transaction processor means for receiving financial information from said database means, said transaction processor authorizing payments in real time for said selected tickets, said transaction processor transmitting

a verification code to said database means, said database means updating said information on available seat and events, said database means further transmitting verification information to said receiver means.

19. A system according to claim 18, wherein said first communication channel comprising:

(a) a satellite uplink/downlink transmission between said programming transmitter and an operator means for receiving and transmitting information; and

(b) a broadcast channel from said operator means to said receiver means.

20. A system according to claim 19, wherein said database means transmits updated information on available performances and events to said programming transmitter.

21. A method for real-time authorization of payment for goods and services from a plurality of retailers available through a video menu having graphics and text information associated with each of said retailers comprising the steps of:

(a) broadcasting the identical video menu to a plurality of receivers;

(b) receiving in each of the receivers the identical video menu and storing the video menu in the receivers for retrieval by a consumer; and downloading and storing within a RAM storage a desired transaction information set from the broadcast information sets, while also acting on the downloaded information within a processor by using programmed instructions and stored information for modifying the downloaded information based on the programmed instructions, the stored information and the downloaded information;

(c) processing within each receiver information concerning a consumer's financial account and customer's selection from the menu;

(d) transmitting to a payment processor the information processed by the receiver which comprises the consumer's financial account and customer's selection from the video menu; and

(e) verifying the consumer financial account information by the payment processor, and thereafter authorizing payment for the selection.

22. A method according to claim 21, further comprising the steps of transmitting by said payment processor a payment authorization signal to a financial institution.

23. A method according to claim 22, further comprising the step of forwarding by said financial institution, said payment authorization to said retailer.

24. A method of transaction processing for purchasing tickets and processing corresponding financial transaction in real-time comprising the steps of:

(a) broadcasting the identical updated menus by a transmitter source, the menus corresponding to a plurality of performances and sporting events to a plurality of receivers;

(b) receiving in each of the receivers the identical menus; and each of said receiver means including a processor, programmed instructions and stored information for acting on downloaded information, and means for generating signals to said processor for modifying the downloaded information based on the programmed instructions, stored information and the downloaded information,

(c) processing within a respective receiver information concerning a consumer's financial account and customer's selection from the menu;

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(d) transmitting to a database means the information processed within the receiver relating to the consumer's financial account and consumer ticket selection from the menus;

(e) verifying the consumer ticket selection by the database means, and transmitting the financial account information by the database means to a transaction processor and thereafter the transaction processor authorizing payment for the selection; and

(f) transmitting from the database means updated information to the transmitting source.

25. A method according to claim 24 further comprising

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the step of transmitting by said transaction processor a payment authorization signal to a financial institution.

26. A method according to claim 25 further comprising the step of forwarding by said financial institution said payment authorization to said database means.

27. A system according to claim 2, wherein said transaction processor after authorizing said desired transaction, verifies said financial information of said user and transmits an authorizing signal to a financial institution, said financial institution making payments to vendors or service providers.

* * * * *

Exhibit B

United States Patent No. 6,246,400



US006246400B1

(12) **United States Patent**
Bush

(10) **Patent No.:** **US 6,246,400 B1**

(45) **Date of Patent:** ***Jun. 12, 2001**

(54) **DEVICE FOR CONTROLLING REMOTE INTERACTIVE RECEIVER**

(76) **Inventor:** **Thomas A. Bush**, 100 First Stamford Pl., Suite 200, Stamford, CT (US) 06902-6732

(*) **Notice:** This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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Primary Examiner—Chris Grant

(74) *Attorney, Agent, or Firm*—Sofer & Haroun, LLP

(57) **ABSTRACT**

A remote control device controls interaction of an interactive receiver unit positioned at a remote location. The remote control device has a housing and manually actuable keypad mounted on the housing. A control mechanism is mounted in the enclosure and operatively connected to the manually actuable keypad for receiving selected input data from the keypad corresponding to desired programming selections of the interactive receiver unit positioned at the remote location. Financial information is stored in the remote, and a transmitter transmits a desired program corresponding to a selected keypad sequence, and also transmits financial information of the user.

54 Claims, 13 Drawing Sheets

(21) **Appl. No.:** **08/982,630**

(22) **Filed:** **Dec. 2, 1997**

Related U.S. Application Data

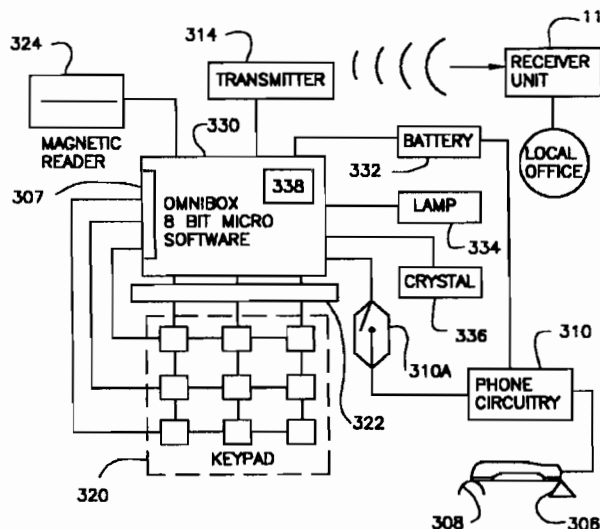
(63) Continuation of application No. 08/444,202, filed on May 18, 1995, now abandoned, which is a continuation-in-part of application No. 08/191,143, filed on Feb. 2, 1994, now Pat. No. 5,475,585, which is a continuation of application No. 07/591,380, filed on Oct. 1, 1990, now abandoned.

- (51) **Int. Cl.⁷** H04N 7/173
- (52) **U.S. Cl.** 345/327; 348/12; 455/5.1
- (58) **Field of Search** 348/12, 13, 6, 348/10, 11, 7, 1, 3; 455/5.1, 6.1, 6.2, 6.3, 4.2, 2, 734, 14, 15, 16, 17, 18; 380/5, 7, 15, 20; 345/327

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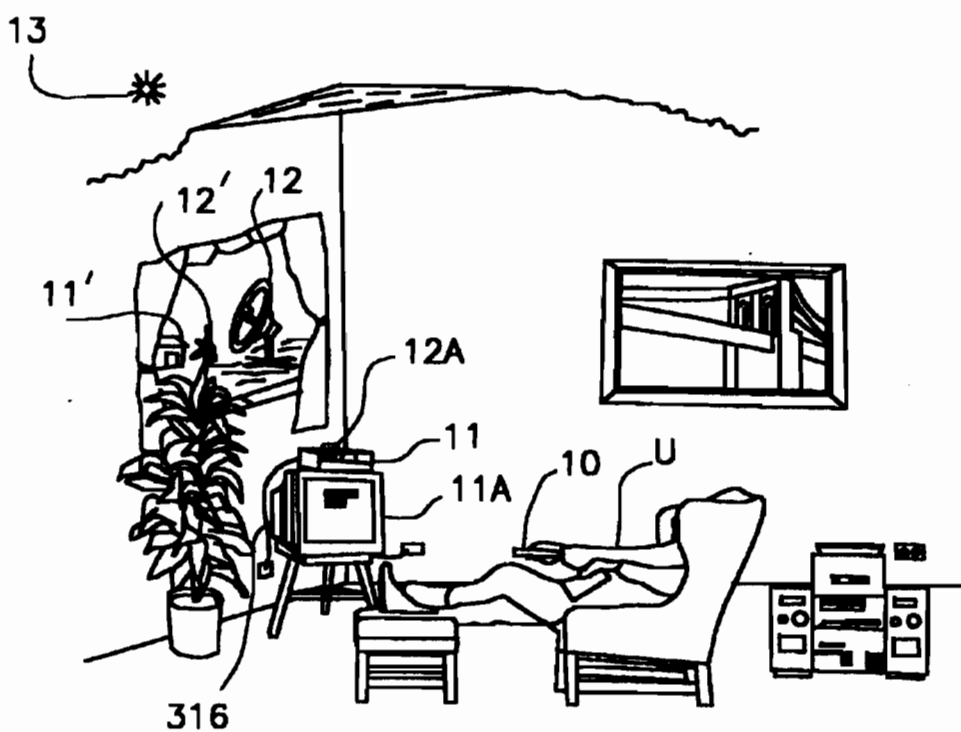


FIG. 1

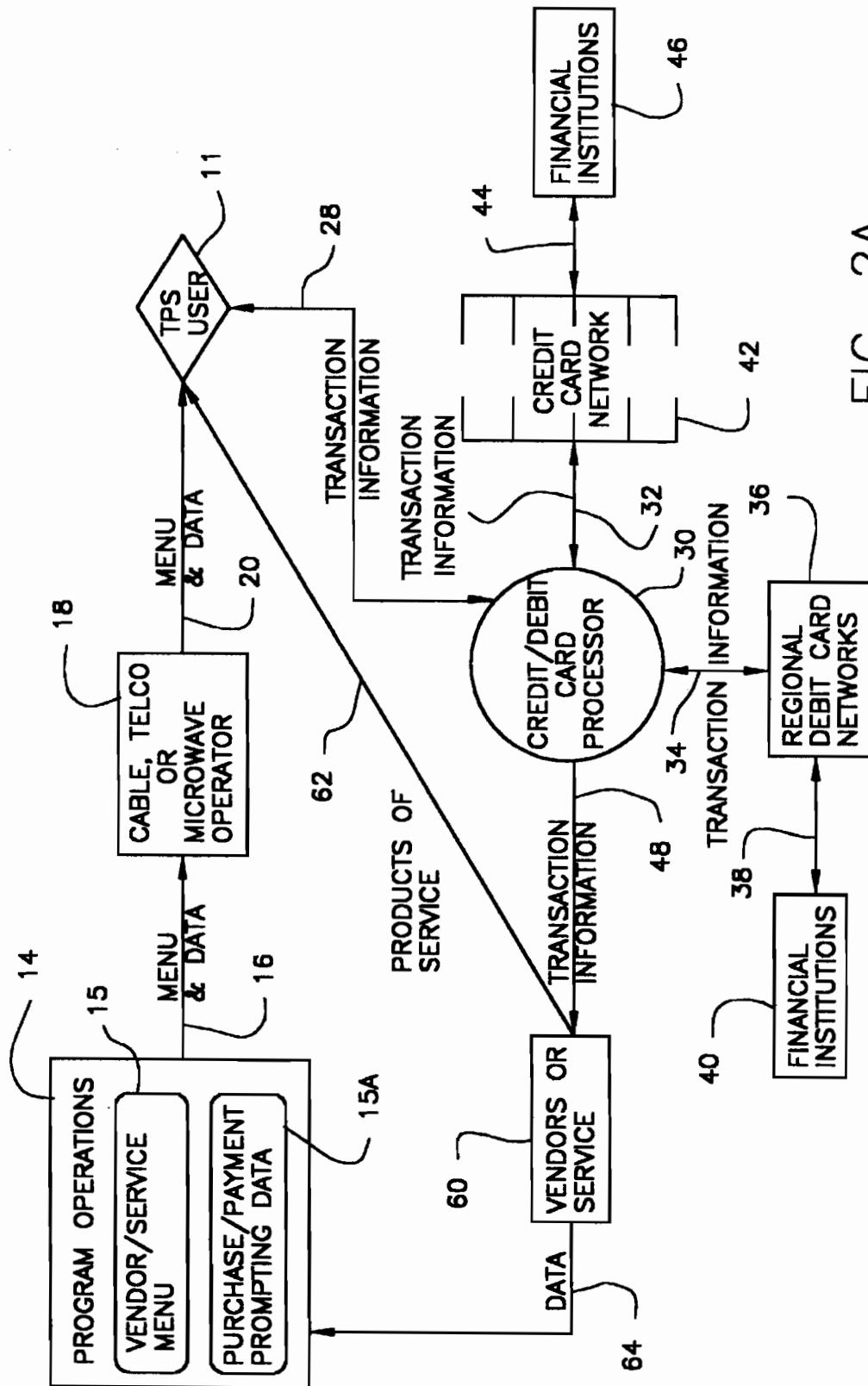


FIG. 2A

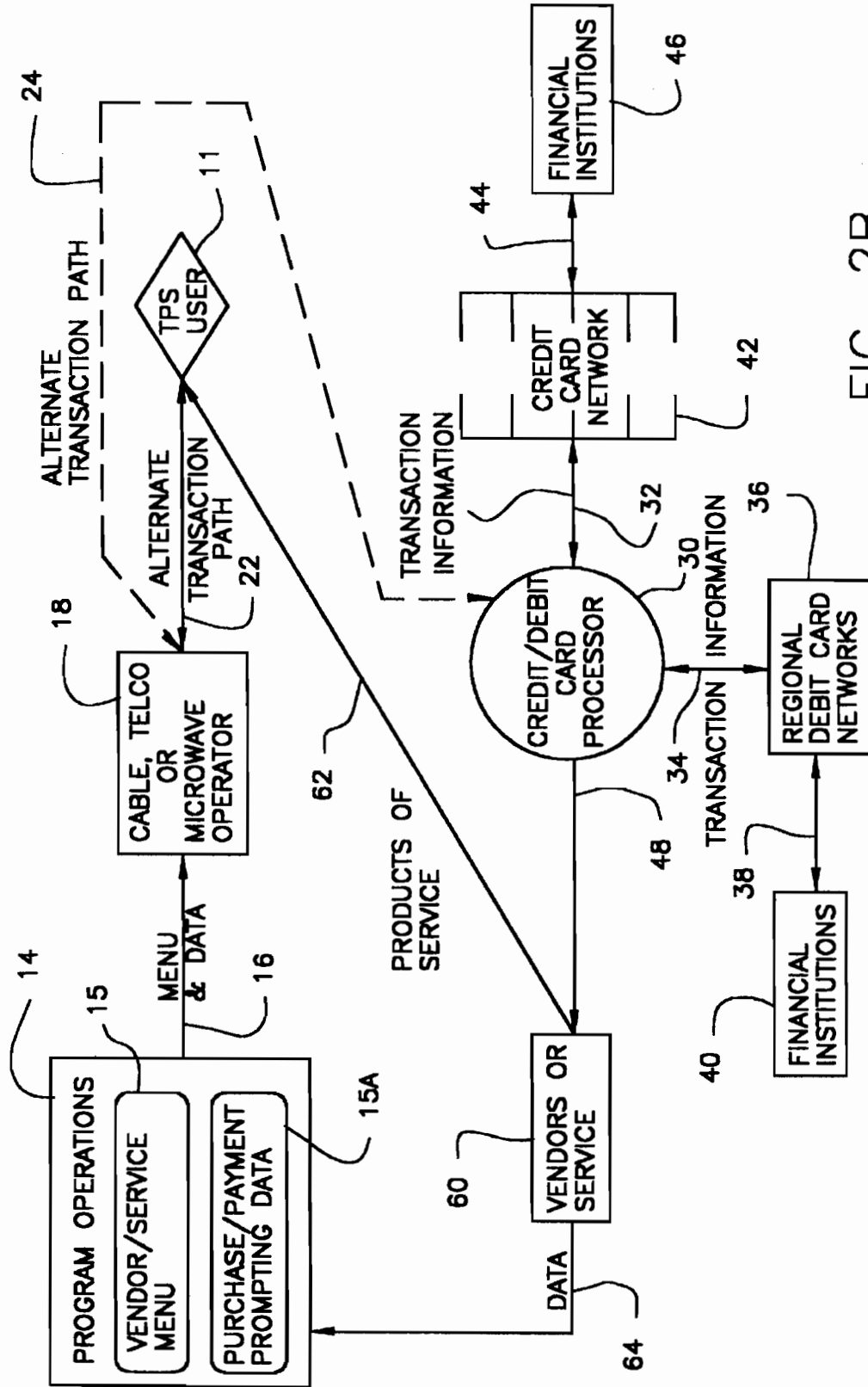


FIG. 2B

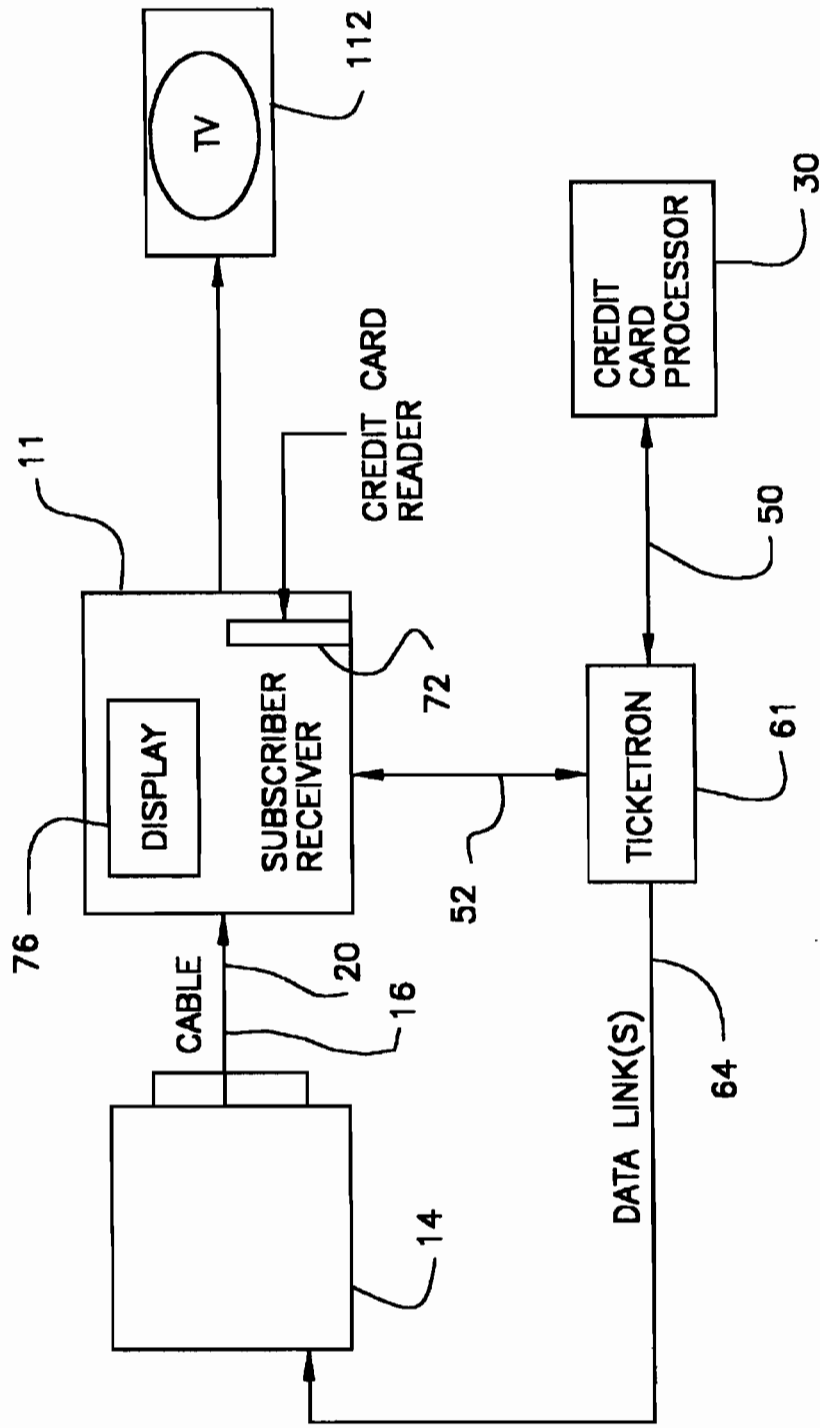


FIG. 3

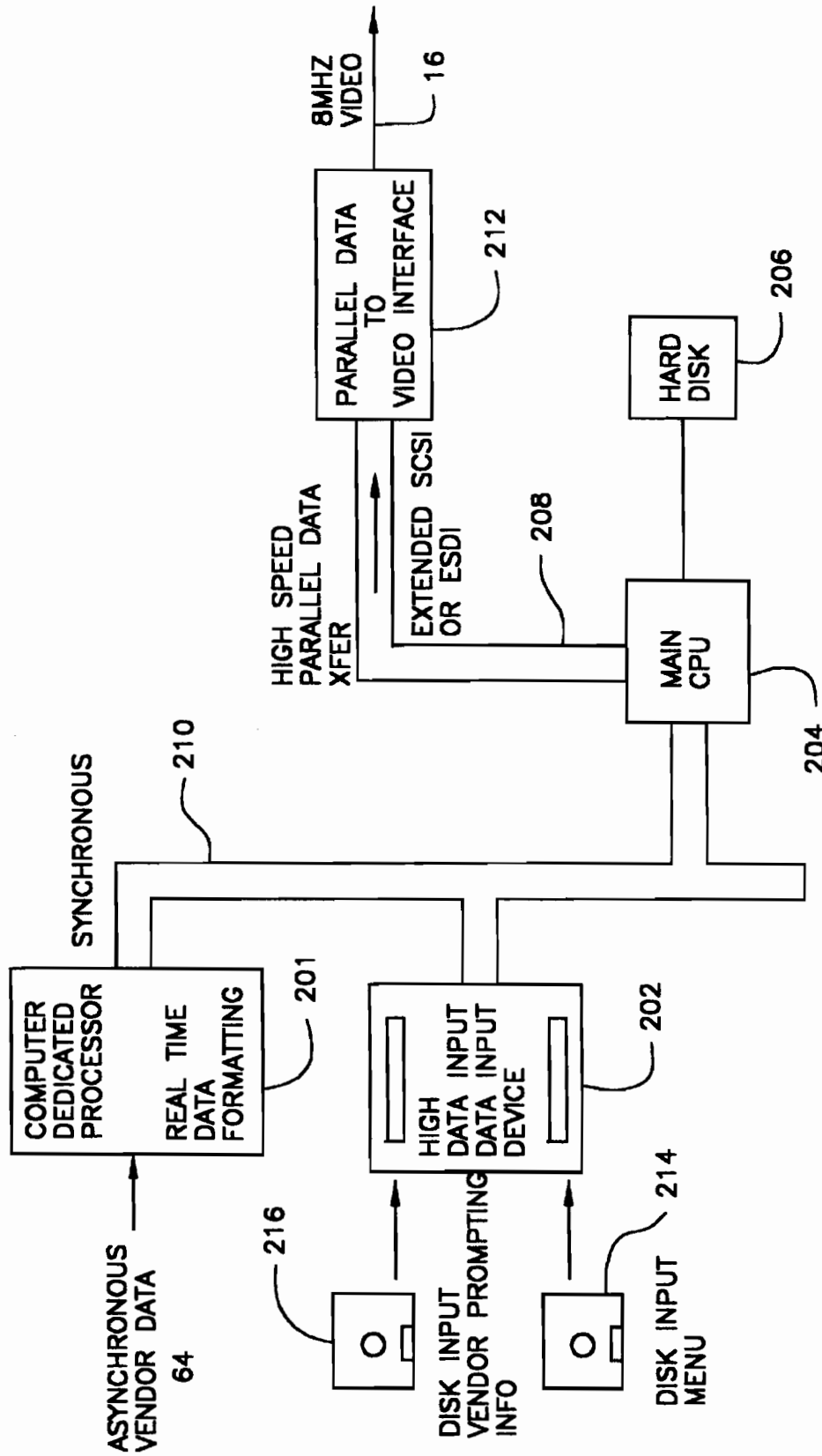


FIG. 4

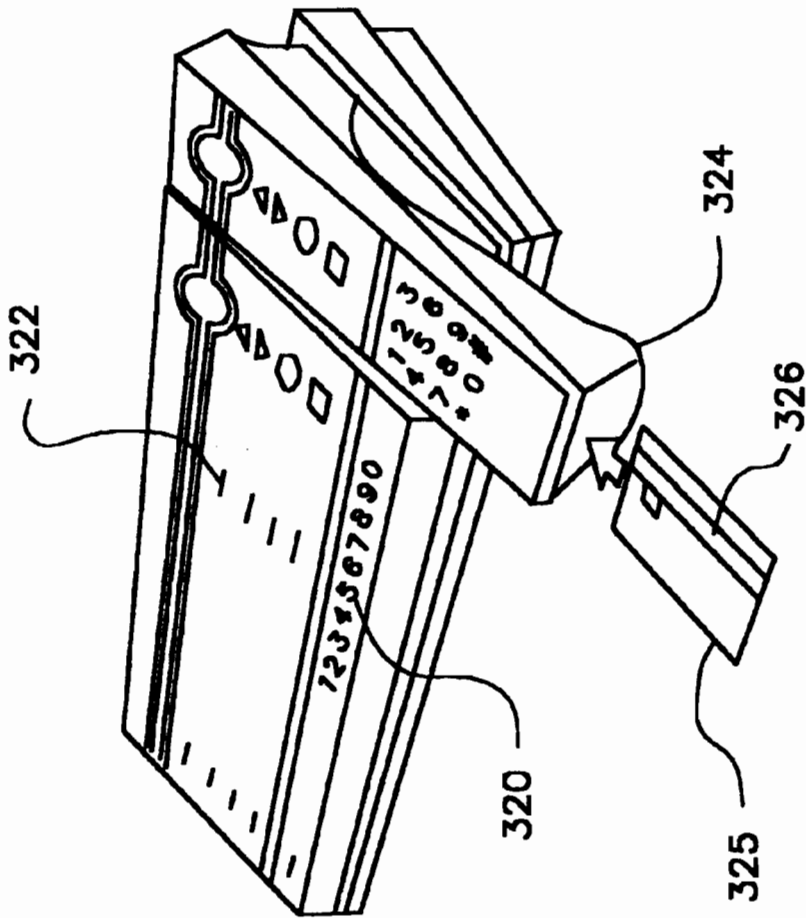


FIG. 5

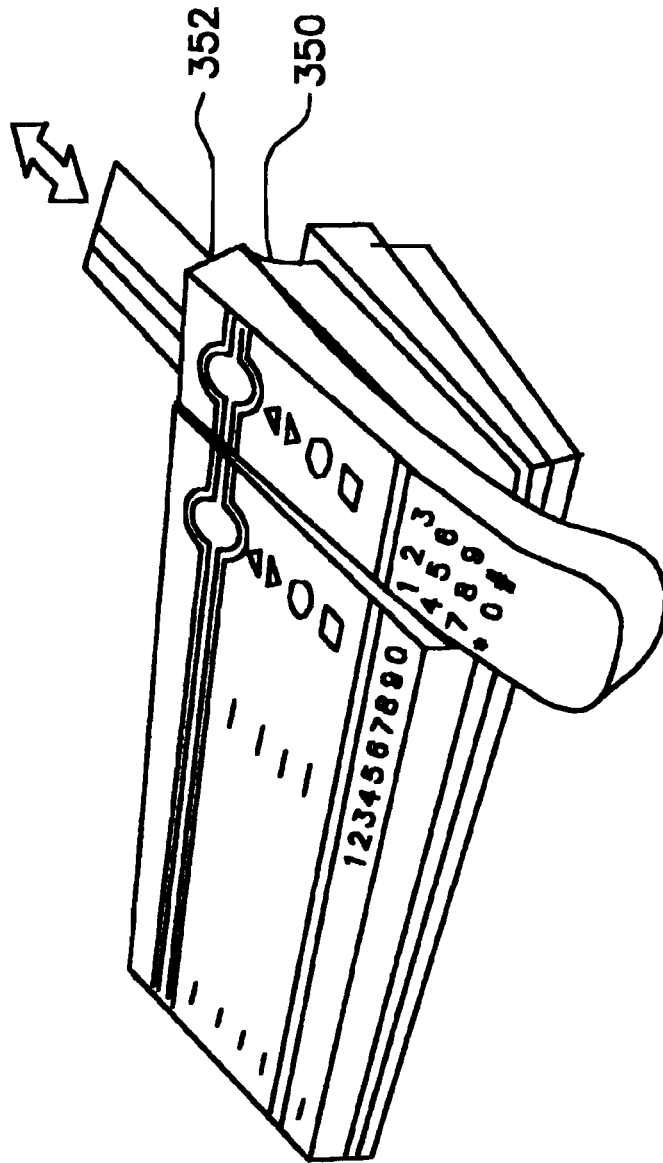


FIG. 6

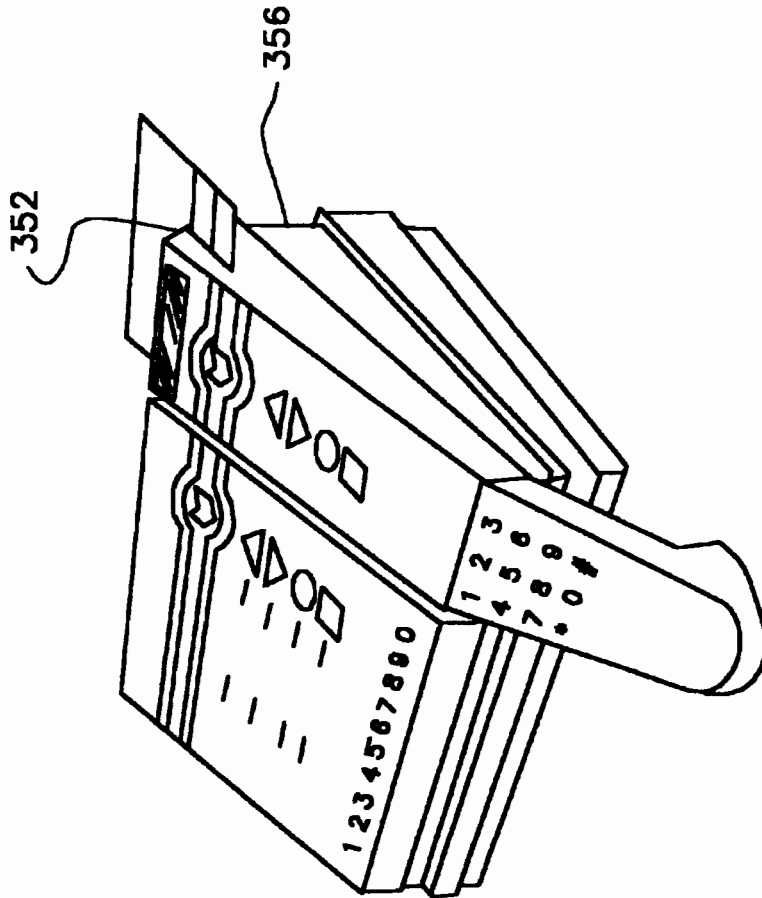
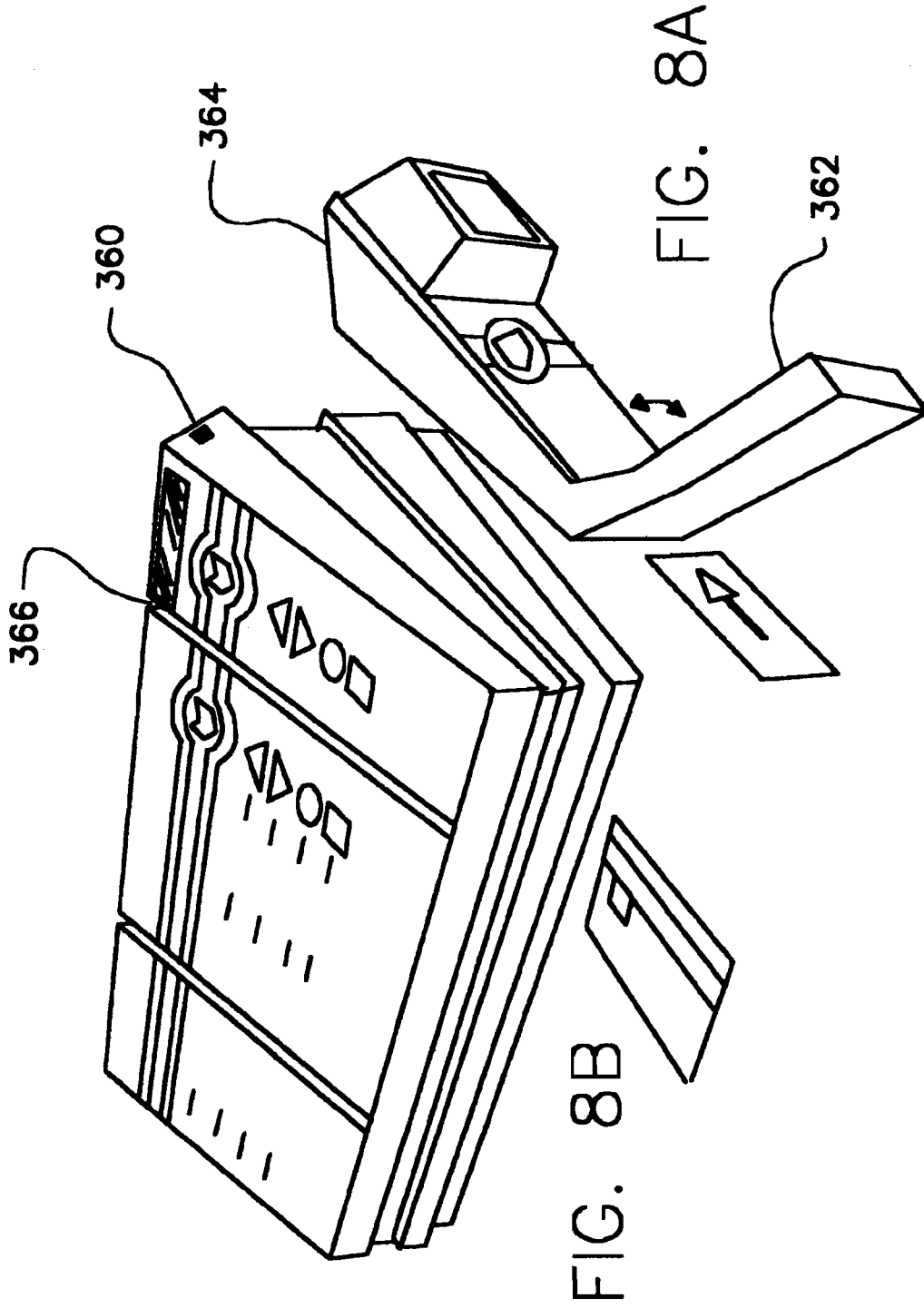


FIG. 7



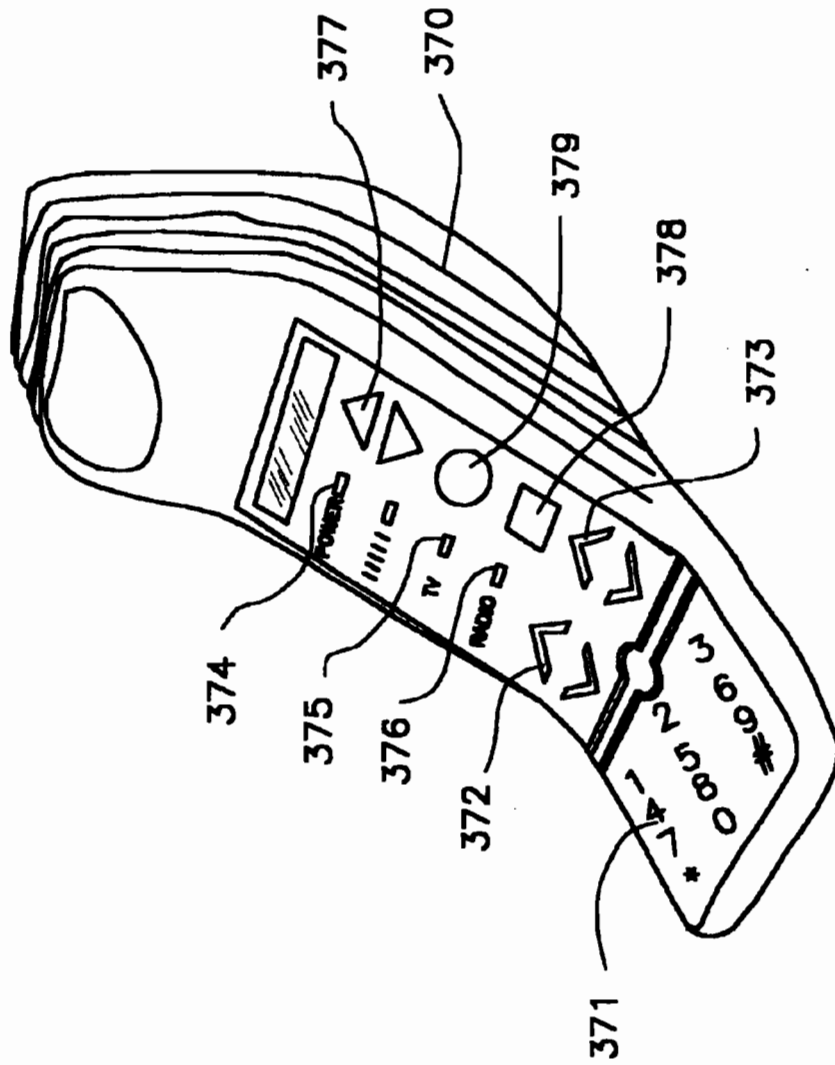


FIG. 9

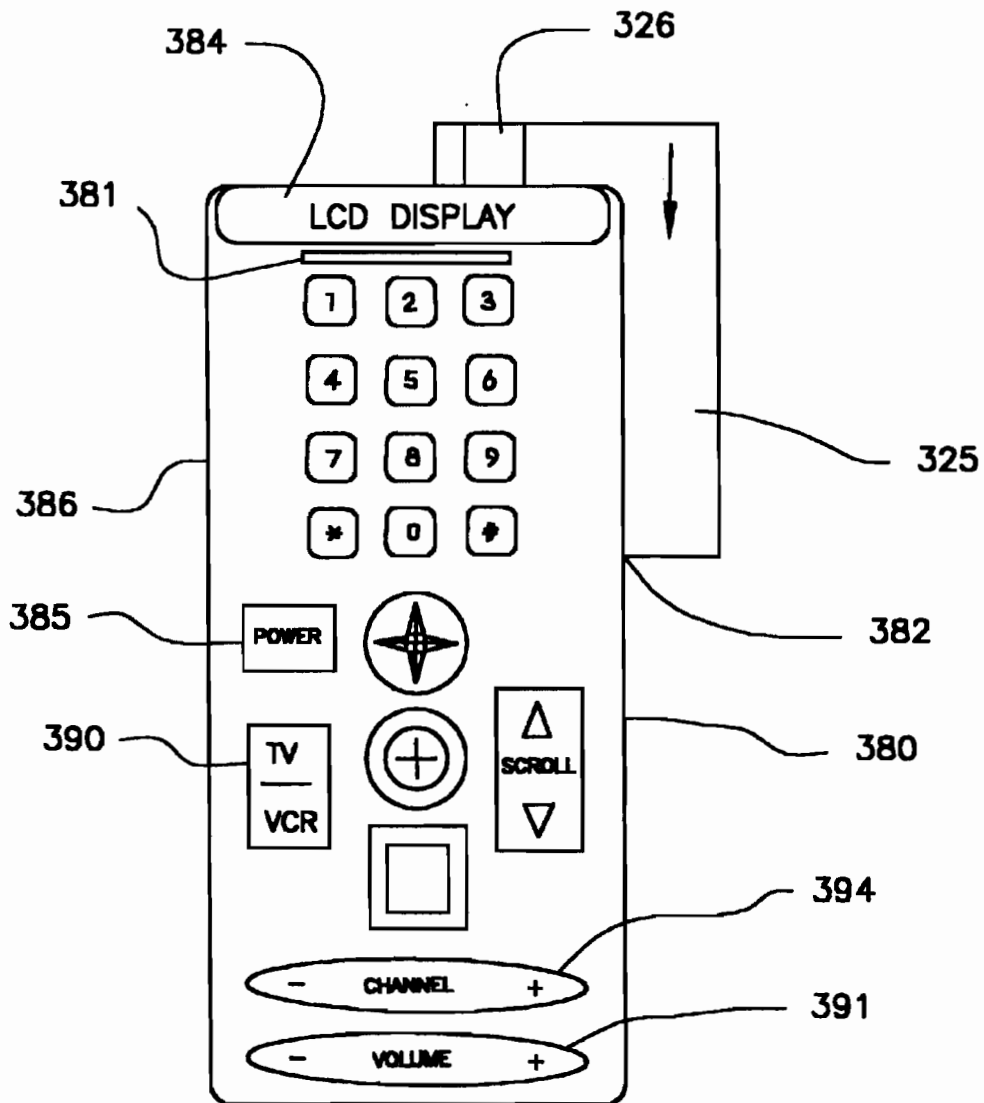


FIG. 10

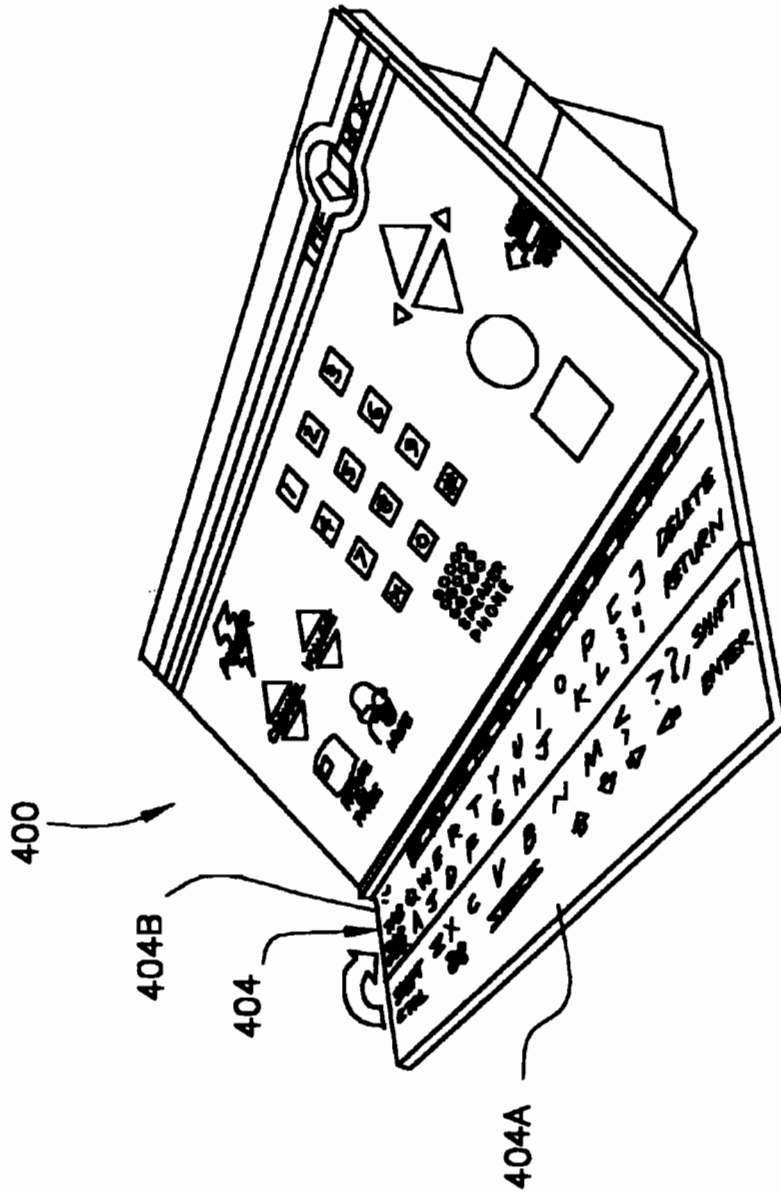


FIG. 11

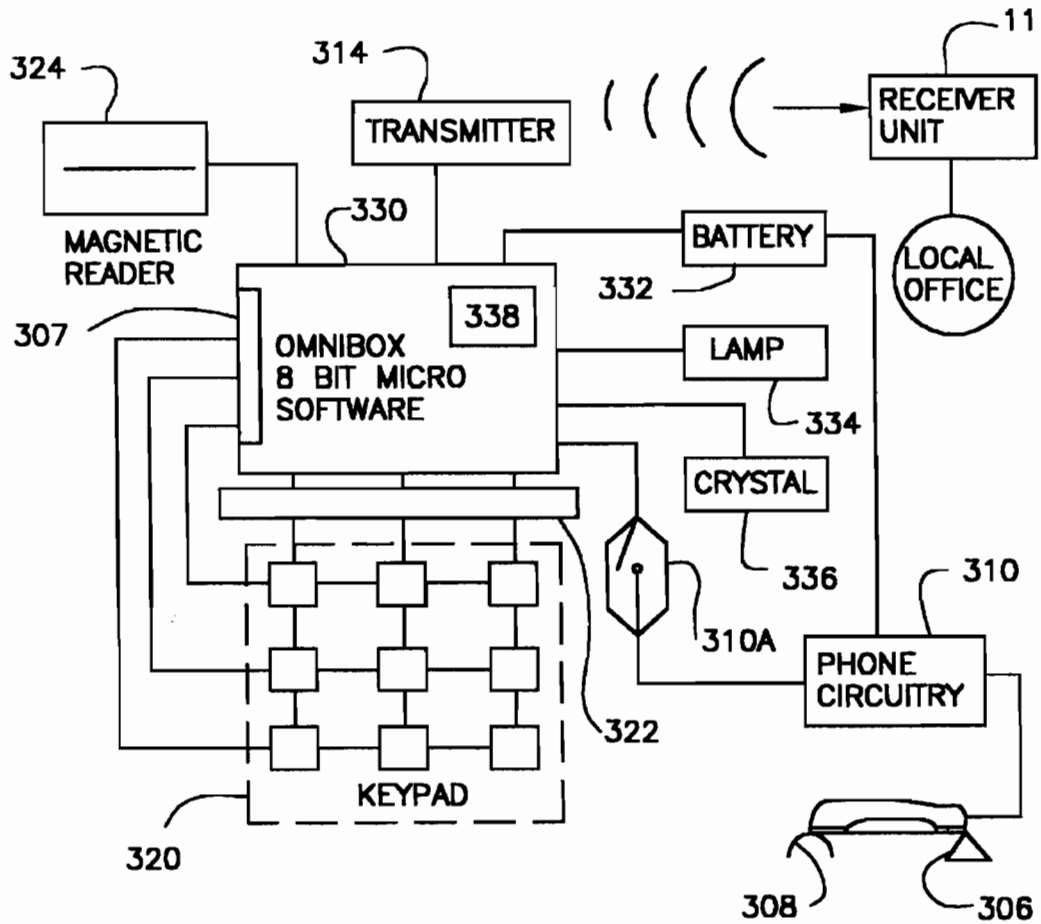


FIG. 12

DEVICE FOR CONTROLLING REMOTE INTERACTIVE RECEIVER

This is a continuation of application Ser. No. 08/444,202 filed May 18, 1995 now abandoned which is a continuation-in-part application of U.S. patent application Ser. No. 08/191,143 filed Feb. 2, 1994, now U.S. Pat. No. 5,475,585 which is a continuation of application Ser. No. 07/591,380, filed Oct. 1, 1990, now abandoned, which are hereby incorporated by reference in their entirety into the present application.

FIELD OF THE INVENTION

This invention relates to a device for controlling a remote interactive receiver unit and, more particularly, to a remote control device which transmits user financial information or programming information to an interactive receiver unit positioned at a remote location.

BACKGROUND OF THE INVENTION

In the copending parent application, a transactional processing system is disclosed for purchasing products and services from a plurality of available products and services, and for processing corresponding financial transactions in real time. A transmitter broadcasts and updates a plurality of transaction information sets associated with a plurality of available products and services via a first communication channel. This first communication channel has a plurality of subchannels, each corresponding to a transaction information set in the first channel.

A plurality of receiver units, e.g., receivers positioned in different households, serve a respective plurality of users, and simultaneously receive the identical transaction information sets broadcast from the transmitter. Each receiver unit includes a user interactive mechanism for selecting and storing a desired information set and for selecting a desired transaction for purchasing a product and services associated with a selected set.

A second communication channel originates at the receiver units and financial information of a respective user is transmitted from a receiver unit through the channel to a transaction processor, which receives the financial information of respective users. The transaction processor generates an authorization signal through the second communication channel to respective receivers to authorize a desired transaction in a real time for the selected products and services. The receiver unit could be incorporated within a television set.

In one aspect of the disclosed invention in the copending parent application, the receiver unit is a tabletop unit having a credit card slot for receiving a card and recording financial information of the user. The receiver unit also includes a keypad and other switches and functions for controlling television station selections. The receiver unit could also include phone components and be formed as a phone handset.

The use of remote devices for controlling television, video recorders/players, and other devices, however, is becoming more commonplace, and in some instances, required. Accordingly, it is desirable if the receiver unit of the transactional processing system could be controlled from a remote control device, and more preferably, a handheld remote control device. A remote control device should not only control processing instructions at the receiver unit, but also receive financial information of a user, such as by a smart card or credit card. Additionally, it is desirable to have

a remote control device which can control operation of a receiver unit positioned at a remote location in which the remote control device not only transmits desired programming selections, but also receives and transmits to the receiver unit financial information of a user for further transactions by the receiver unit.

SUMMARY OF THE INVENTION

The present invention now allows transmission from a remote control device of desired programming selections to a receiver unit positioned at a remote location so as to choose a desired programming instruction set and interact therewith through a manually actuable keypad. The remote control device also transmits financial information of the user to the receiver unit. The receiver unit selects, stores and displays on a screen, such as television, the desired information set from these sets that are simultaneously received in the receiver unit.

A housing forms an enclosure and has a manually actuable keypad mounted on the housing. A processor is mounted in the enclosure and operatively connected to the manually actuable keypad for receiving data input from the keypad corresponding to desired programming selections at the remote receiver unit. The remote control device also stores financial information of the user. A transmitter is operatively connected to the processor for transmitting the desired programming selections to the receiver unit corresponding to the selected keypad sequence so as to choose a desired programming and interact therewith. The remote control device also transmits financial information of the user to the receiver unit.

In one aspect of the invention, the remote control device comprises the handset of the phone. Phone numbers are dialed from the keypad, and phone data is transmitted and received to and from a phone receiver unit positioned at the receiver unit. The phone receiver unit is connected to the local office. The phone receiver unit also may be an integral part of the receiver unit.

The remote control device also includes a switch for switching between use as a phone handset and use as a controller which interacts with the receiver unit. The remote control device in another aspect of the invention includes a switch for selecting between use as a controller for keypad selection of television channels and keypad selection of subchannels of the transaction information sets. Financial information can be input by wiping a card containing the financial information of the user within a slot positioned on the remote control device housing. The slot can include a magnetic-strip/IC reader. In still another aspect of the invention, the keypad is a qwerty keypad.

BRIEF DESCRIPTION OF THE DRAWINGS

The foregoing advantages of the present invention will be appreciated more fully from the following description, with reference to the accompanying drawings, in which:

FIG. 1 is an environmental view of the inside of a home showing a user having the remote control device of the present invention and using the device to interact with the transactional processing system receiver unit;

FIG. 2A is a block diagram of the Transactional Processing System (TPS);

FIG. 2B is a block diagram of an alternate embodiment of the Transactional Processing System.

FIG. 3 is a block diagram of a TPS for real-time service requiring continuous update.

FIG. 4 is a block diagram of a TPS transmission system.

FIG. 5 is an isometric view of a Transactional Processing System receiver unit having a handheld remote control device in the form of a phone handset where a credit card is longitudinally inserted in its lower portion.

FIG. 6 is an alternate embodiment of the receiver unit of FIG. 5 showing a difference phone handset.

FIG. 7 is still another alternate embodiment of the receiver unit of FIG. 6 showing a different phone handset.

FIGS. 8a, b is an isometric view of an alternate embodiment of the receiver unit.

FIG. 9 is an alternate embodiment of the remote control device.

FIG. 10 is an alternate embodiment of the remote control device which has no phone components.

FIG. 11 is an alternate embodiment of the remote control device showing a more complex remote control device having a query keyboard.

FIG. 12 is a block diagram of various components of the remote control device and portions of the Transactional Processing System.

DETAILED DESCRIPTION OF THE INVENTION

Referring now to the drawings in which like numeral represent like components, FIG. 1 illustrates an environmental view of the inside a house showing a user "U" having the remote control device 10 of the present invention using it in conjunction with the receiver unit 11 of the transactional processing system. As illustrated, the receiver unit 11 receives signals from a satellite dish 12, and satellite 13 uplink via cable 12a. Another receiver 11' is a part of the system and receives signals simultaneously from its satellite dish 12' and uplink connection. In these illustrated embodiments, the receiver unit 11 is connected to a television 11a which displays selected transactions sets.

FIG. 2A illustrates block diagram of Transactional Processing System (TPS). Many details of the Transaction Processing System are set forth in the copending parent application which is incorporated by reference in its entirety into the present application. For purposes of understanding, a general description of the Transaction Processing System is set forth below.

A transmitting source 14 broadcasts a signal, preferably video, representing one or many video menus, offering the consumer the option to pay for either a product or a service. The menu information 15 contains the picture of graphic information corresponding to vendors and services available in the system. The menu information could be broadcasted through a transmission channel 16 to a receiver 18 typically operated by a cable, telephone company, microwave TVRO or DBS operator. In a preferred embodiment described herein, cable operator 18 would in turn transmit information to receiver units 11 within its broadcast area, through transmission channel 20. Transmission channel 16 can be a full video channel or a narrow band channel through a satellite uplink-downlink.

The menu information 15 could be an aggregate of many pictures corresponding to various products or services combined into one full video signal and demodulated into narrow band information, whereby the TPS receiver would allow the customer to choose from many different menus without the cable operator 18 giving up a wide band or prime video channel.

In addition to menu information 15, the transmitting source 14, would also broadcast prompting data 15A, which

represent the necessary information to electronically prompt a subscriber through the process of purchasing an item via a mail order catalog or paying for a selected service. Once the vendor or service is selected the prompting data for each vendor or service would be downloaded into a RAM within the receiver unit 11. The prompting information for each vendor or service could then be displayed on an LCD within the receiver unit 11 or in a television set connected to the receiver unit 11. It is also possible to combine both the picture and prompting data information and transmit the combination to receiver unit 11.

The user at the receiver unit 11, makes a menu selection and answers the questions or prompts, pertinent to the selected vendor or service. The user then wipes a credit/debit card through the receiver unit 11 which allows the credit/debit card to be authorized and purchase or payment be made. The card information would be transmitted from receiver unit 11 to transaction processor 30 via transmission channel 28. Typical receiver unit 11 would transmit the user selection and the financial account information via a modem, through a telephone line to transaction processor 30. The transaction processor 30 would then verify the user's financial account. This includes verifying whether the consumer does in fact have the requisite sum available in the chosen account to pay for the selection made.

In the event that the consumer has used a credit card, the transaction processor 30 would then forward the verified information to regional credit card network 42, through transmission channel 32. This information would be then forwarded to a participating financial institution 46, through transmission channel 44. The financial institution 46 would in turn pay the vendor or service provider 60, and the consumer would receive a bill or receipt for that particular transaction. Similarly, in the event that the consumer has used a debit card, the transaction processor 30, would then forward the verified information to a regional debit card network 36, through transmission channel 34. This information would be then forwarded to a participating financial institution 40, through transmission channel 38.

The transaction information would be also transmitted from transaction processor 30 to vendor or service provider 60, via transmission channel 48. Vendor or service provider 60 would then in turn provide the service or the goods purchased to the user via appropriate channels. Vendor or Service provider 60 could also send purchasing data to transmitting source 14 via transmitting channel 64 for upgrading service and product information, product availability, price change, products purchased, and various other information.

There are various scenarios in which transaction information could be verified. For example, in order for the consumer to be assured that the selected product or service can be delivered on specific desired terms, the transaction processor 30 would cross check the transaction information transmitted through channel 28 with the corresponding vendor or service database. Once that transaction has been cross-checked, the credit card processor 30 would send the authorization signal.

Alternatively, the vendor/service provider 60 may update its corresponding database and transmit such updated information to transmitting source 14. Transmitting source 14 would then change the menu 15 and prompting data 15a and continuously broadcast the updated information to receiver units 11. Actual cross-check before authorization could be made locally in receiver unit 11. Hence customer's selection would be compared with updated information broadcasted to receiver 11 for product verification purposes.

FIG. 2B depicts an alternate communication path for transaction authorization. When cable operator 18 requires to monitor all transaction interactions the consumer through the receiver unit 11 would make a selection. The information representing such selected service or product would be transmitted to cable operator 18 via transmission channel 22. Cable operator 18 after receiving the transaction information would retransmit such information to transaction processor 30 via transmission channel 24. Thereafter the transaction verification would proceed as discussed before.

There are, however, situations when up to the minute information is critical to the consumer and the retailer. A typical scenario is providing a limited product or service to a pool of consumers. This includes tickets for a performance of a sporting event. Since the available seats are very limited, it would become impractical to update the database by service provider 60, transmit that database to source 14, and retransmit that information to receiver unit 11 for verification purposes.

An alternate communication path as depicted in FIG. 3 could thus be established, where TPS user through a series of prompts would select the desired event. The information representing the user's choice would be transmitted to a ticket provider 61 like Ticketron, via transmission channel 52. The ticket provider 61 contains a database wherein available seats are continuously updated and the desired selection would be cross-checked against that database. If desired seat is available, the ticket provider 61 would transmit the transaction information to transaction processor 30 via transmission channel 50 for credit authorization. Once the credit is authorized as described hereinabove, the credit processor would transmit the verification signal to ticket provider 61, wherein the database contained therein would be updated and a confirmation message would be transmitted to the receiver unit 11 via transmission channel 52. The ticket provider 61 would transmit updated even availability and other pertinent information to source 14 through transmission channel 64.

FIG. 4 shows the block diagram of transmitting source 14, wherein all the pertinent information for system's operation is programmed and accordingly transmitted to receiver units 11. Vendor or service provider's data can be transferred to the transmitting source 14, either through asynchronous communication or by hard copy data like computer disk storage. In FIG. 4, the high capacity data input device 202, has the ability to load menu (picture or graphics) and prompting data information via external disk storage devices 214 and 216.

Alternatively, both the video and prompting information could be combined and fed into the data input device 202 together. Various vendors who do not maintain an in-house database, could periodically update their product information and send the updated information to TPS programmer, in the form of computer disks 214 and 216. That information would be then transferred to the Main CPU 204, which controls the overall data formatting, and transmits the formatted data to parallel data to video interface 212.

In situations where the vendor or the service provider maintains a database for updating the product information, transmitting source 14 would be connected to that database via communications channel 64. The high speed vendors' or service providers' data would then be transmitted asynchronously from corresponding databases to computer dedicated processor 201. That information would be buffered within processor 201. The processor 201 would then perform packet formatting and output this data in a synchronous manner that is polled by the main DPU 204.

The main CPU 204, would perform time multiplexing to gather data belonging to various vendors and service providers. The data along with the formatted menu, prompting data and other housekeeping information will be time multiplexed and assembled by the main CPU 204 for transmission over the parallel bus to the parallel data to video interface 212. The video interface 212, converts the digital data into video format for transmission to receiver units 11. In the embodiment mentioned herein, video interface 212, is model 17480, by Quantel.

Hard disk 206 stores all the necessary information for the transmitting source 14. Data from main CPU 204 to video interface 212, is transmitted via an extended SCSI or ESDI, as commonly known in the art. Further information of the Transaction Processing Information of the present invention can be obtained from the incorporated parent application.

Referring now to FIGS. 5 through 11, there are illustrated various alternate embodiments of a remote control device which is associated for use with the receiver unit 11 of the Transaction Processing System. For purposes of understanding each alternate embodiment of the remote control device is indicated by a reference number beginning in the 300 series. Those components that are common to the different embodiments are given similar reference numerals. In FIG. 5, there is illustrated a receiver unit 11 which has a remote control device 300 associated therewith. The remote control device 300 is configured similar to a phone handset and is received within an end slot 302 of the receiver unit 11. The remote control device 300 includes phone circuitry (FIG. 12) which includes a microphone 306, receiver 308 and associated components 310 for receiving and transmitting phone messages to and from the receiver unit 11. The phone preferably has wireless connection to the receiver unit 11, and can use the transmitter 314 of the remote 300 for communication. The transmitter operates on several frequencies and transmits financial information on a communication channel different from the communication channel used to transmit desired programming selections. Transmitter 314 can include an interface 314a for interacting with a videogame.

The receiver unit 11 is operatively connected to the phone line 316 which connects to the central office (as shown in FIG. 1). As noted above, the phone line connected to the receiver unit forms a part of the second communication channel (FIG. 1).

The receiver unit 11 includes all the standard controls such as a numeric keypad 320, and a selector 322 for activating a scrolling function within the receiver unit 11. Other function keys may indicate power, tv/vcr, channel selector and volume controls. It is advantageous for any controls and function keys that are included on the remote control device to be duplicated on the receiver unit 11 in case the remote control device 300 is lost, misplaced or broken. The receiver unit 11 also can include a slot (not shown) for accepting a smartcard or credit card to obtain and store financial information of the user.

As shown in FIG. 5, the remote control device 300 also includes a slot 324 at the bottom portion of the handset adjacent to the speaker microphone. A credit card or smart card 325 is inserted longitudinally into the slot 324. The slot 324 typically is a magnetic-strip/IC reader, which reads the financial information contained on the magnetic strip 326 of the card.

As discussed above, FIG. 12 illustrates a high level block diagram of a remote control device 300 of the present invention, and shows various components of the device. The

various switching mechanisms, functions, keypad and circuiting components can be selected by one skilled in the art. The remote control device 300 of the present invention also includes a switch mechanism 310a for switching between use of the remote control device as a phone handset and use as a controller for interaction with the receiver unit 11. Additionally, the remote control device includes a switching mechanism 327 for switching between use as a remote control device which selects television or cable channels and keypad selection of subchannels of the transaction information sets controlled by the receiver unit 11.

The remote control device 300 includes an eight bit microprocessor 330 which includes permanent firmware for operating some of the other components of the device. Additionally, the device 300 includes a battery 332, a lamp 334 for illuminating an LCD display and other controls and functions. A crystal oscillator 336 ensures frequency control. The keypad 320 is operatively connected to the microprocessor 330. The remote control device also includes a long term storage 338, such as an EEPROM, which stores financial information of the user for subsequent transactions, hours, days, or months in advance.

FIG. 6 illustrates an embodiment of a remote control device 350 of the present invention similar to that shown in FIG. 5. The card containing financial information is inserted longitudinally in a slot 352 positioned at the top portion of the handset adjacent the receiver.

FIG. 7 still shows another embodiment of a remote control device 356 of the present invention where the card is inserted horizontally in the top slot 352.

The embodiments of FIGS. 5, 6 and 7 could be used with conventional games.

FIG. 8a discloses another embodiment of a remote control device, indicated generally at 360, of the parent invention where the speaker microphone assembly 362, which includes some control functions, is pivotally attached to the main body 364 of the remote control device. FIG. 8B shows the remote control device 360 resting in the slot 366 of the receiver unit 322.

FIG. 9 is another embodiment of the remote control device 370 of the present invention in which more numerous control functions are mounted on the device. These functions can include a keypad 371, volume control 372, channel selection 373, power off/on 374, TV and radio selector 375, 376, scroll 377, and switches 378, 379 for selecting between phone operation and interactive communication with a receiver unit 11.

Referring now to FIG. 10, a more compact remote control device 380 which does not include phone components is illustrated. The device includes a slot 382 for receiving a credit card or other card containing financial information of the user as well as a small LCD display 384. A numeric keypad 386 for controls either selection of television channels or various transaction processing sets depending on the position of the selector switch 387. Additionally, the device includes a power switch 385, and a TV/VCR button 390. The device also includes standard channel and volume buttons 394, 391. Other controls will be included desired.

Referring now to FIG. 11, there is shown a stationary remote control device 400, which can be mounted on an end table, or other table such as adjacent to a sofa, for controlling function of the receiver unit 11. This device 400 interacts with the receiver unit 11, and includes a split qwerty/keyboard 404 which includes function keys F1 through F12. Half of the keyboard 404a comprises a lower portion which is pivotally mounted to the upper half keyboard section

404b. Additionally, in one aspect of the invention, this embodiment of the remote control device 400 can include most components of the transactional processing system receiver unit so that it doubles as a receiver unit itself, with full computing functions such as provided with a qwerty keyboard 404.

The remote control device of the present invention is advantageous because it now allows control over the receiver unit of the transaction processing system from a remote location. Additionally, a user sitting in his home can relax and not only use a telephone, but also at his option, input financial information and communicate with the receiver unit for selecting various transactions while maintaining the same device.

It should be understood that the foregoing description of the invention is intended merely to be illustrative thereof, and that other embodiments, modifications and equivalents may be apparent to those skilled in the art without departing from its spirit.

That which is claimed is:

1. A remote control device for use with a transactional processing system having a receiver unit that receives information from a programming source over a communication channel, said receiver unit also including means for receiving and selecting desired programming selections, said remote control device comprising:

a housing forming an enclosure;
a manually actuable keypad mounted on the housing,
control means mounted in the enclosure and operatively connected to said manually actuable keypad for receiving selected input data entered manually on the keypad corresponding to said desired programming selections that are provided to said receiver unit by said programming source;

means for receiving financial information from a user of said remote control device;

transmitter means operatively connected to said control means for:

- a) transmitting desired programming selections to said receiver unit corresponding to a selected keypad sequence so as to choose a desired programming and interact therewith through the manually actuable keypad,
- b) transmitting the financial information to the receiver unit, said receiver unit transmitting said financial information on a selected communication channel to authorize a desired transaction corresponding to a desired programming selection.

2. The device according to claim 1 including means for transmitting the financial information on a communication channel different from the communication channel used to transmit desired programming selections.

3. The device according to claim 1 where in said device further comprises the hand set of a phone, wherein phone numbers are dialed from the keypad of said device, and including means for respectively transmitting and receiving data to and from the receiver unit positioned at the remote location.

4. The device according to claim 3 wherein said device includes switch means for switching between use of the device as a phone handset and use of the device as a controller for interaction with the interactive receiver unit positioned at the remote location.

5. The device according to claim 1 wherein said means for receiving financial information of said user includes a slot for wiping a card containing the financial information of the user.

6. The device according to claim 5 wherein said slot comprises a magnetic-strip/IC reader.

7. The device according to claim 1 wherein said keypad comprises a qwerty keypad.

8. The device according to claim 1 wherein said housing is configured to be held in one hand.

9. A device according to claim 1 wherein said transmitting means comprises means for interacting with a video game.

10. A device according to claim 1 wherein said receiver unit is positioned within a television set.

11. A remote control device for use with a transactional processing system having a receiver unit that receives identical transaction information sets broadcast in subchannels from a programming transmitter and then selects, stores and displays a desired information set, comprising:

a housing,

a manually actuable keypad positioned on an outer surface of the housing,

control means contained within the housing and operatively connected to said manually actuable keypad for receiving data entered manually on the keypad corresponding to desired programming selections in the receiver unit that receives identical transaction information sets,

means for storing financial information of the user, means mounted by the housing for inputting said financial information to the financial storing means,

transmitter means operatively connected to said control means for

a) transmitting desired programming selections to a receiver unit corresponding to the selected keypad sequence so as to choose a desired programming and interact with the receiver unit through the manually actuable keypad, and

b) transmitting any financial information of the user to the receiver unit to authorize a desired transaction in real time,

phone circuitry including speaker and microphone means, and phone receiver and phone transmitter means for transmitting and receiving phone signals to and from said receiver unit, and

switch means for actuating said remote control device between 1) a phone wherein said phone circuitry is activated, and 2) a device for selectively interacting with said receiver unit to choose desired programming and authorize transactions.

12. The remote control device according to claim 11 wherein said keypad includes means for activating a scrolling function within the receiver unit for scrolling through individual transaction information sets.

13. The remote control device according to claim 11 wherein said means for inputting financial information of said user includes a slot for wiping a card containing the financial information of the user.

14. The remote control device according to claim 13 wherein said slot comprises a magnetic-strip/IC reader.

15. The remote control device according to claim 11 wherein said financial information storage means includes long term storage means for storing financial information of the user for subsequent transactions.

16. The remote control device according to claim 15 wherein said long term storage means comprises an EEPROM.

17. The remote control device according to claim 11 wherein said keypad comprises a qwerty keypad.

18. The remote control device according to claim 11 including another switch means for switching between key-

pad selection of normal television channels and keypad selection of subchannels of the transaction information sets.

19. The remote control device according to claim 11 wherein said housing is configured to be held in one hand.

20. A remote control device according to claim 11 including means for interacting with a video game.

21. A remote control device for use with a transactional processing system having a receiver unit that receives identical transaction information sets broadcast in subchannels from a programming transmitter and then selects, stores and displays a desired information set, said receiver unit also including means for receiving and selecting desired television channels, comprising:

a closed housing which is configured to be held in one hand,

a manually actuable keypad positioned on an outer surface of the housing,

control means contained within the housing operatively connected to said manually actuable keypad for receiving data entered manually on the keypad corresponding to desired programming selections in the receiver unit,

means for storing financial information of the user, and including means positioned on the housing for inputting said financial information to the storing means,

transmitter means operatively connected to said control means for

a) transmitting desired programming selections to the receiver unit on a first communication channel corresponding to the selected keypad sequence so as to choose i) desired programming of transaction information sets and ii) selected television channels, and

b) transmitting the financial information of the user to a receiver unit on a second communication channel to authorize a desired transaction in real time, and

switch means for actuating said remote control device between 1) a television controller for selecting television channels, and 2) a controller for interacting with said receiver unit for selecting subchannels and transmitting financial information to said receiver unit.

22. A remote control device according to claim 21 including means for interacting with a video game.

23. A remote control device for selectively controlling interaction with a receiver unit of a transactional processing system used for purchasing products and services from a plurality of available products and services,

wherein said receiver unit includes means for receiving identical transaction information sets broadcast in subchannels from a programming transmitter, and including means for selecting, storing and then displaying a desired information set from the information sets received within the receiver unit and to select a desired transaction, said receiver unit including means for receiving programming selection and financial information signals from a remote control device, said remote control device comprising:

a manually actuable keypad,

control means operatively connected to said manually actuable keypad for receiving selected data entered manually on the keypad corresponding to desired programming selections in the receiver unit,

means for storing financial information of the user, and transmitter means operatively connected to said control means for

a) transmitting the desired programming selections to said receiver unit corresponding to a selected keypad

sequence so as to choose the desired programming and interact therewith through the manually actuatable keypad, and

- b) transmitting the financial information of the user to the receiver unit through a second communication channel to authorize a desired transaction in real time.

24. The remote control device according to claim 23 wherein said keypad includes means for activating a scrolling function within the receiver unit for scrolling through individual transaction information sets.

25. The remote control device according to claim 23 wherein said means for storing financial information of said user includes a slot for wiping a card containing the financial information of the user.

26. The remote control device according to claim 25 wherein said slot comprises a magnetic-strip/IC reader.

27. The remote control device according to claim 23 wherein said storing means includes long term storing means for storing financial information of the user for subsequent transactions.

28. The remote control device according to claim 27 wherein said long term storage means comprises an EEPROM.

29. The remote control device according to claim 23 wherein said keypad comprises a qwerty keypad.

30. The remote control device according to claim 23 wherein said receiver unit includes means connecting to a local phone line, and wherein said remote control device comprises the hand set of a phone, wherein phone numbers are dialed from the keypad of said device, and including means for transmitting and receiving the phone number between the remote control device and the receiver unit.

31. The remote control device according to claim 30 wherein said remote control device includes switch means for switching between use as a phone handset and use as a controller for interaction with the receiver unit.

32. The remote control device according to claim 23 wherein said device includes means for selecting normal television channels, and including switch means for switching between keypad selection of television channels and keypad selection of subchannels of the transaction information sets.

33. A transactional processing system for purchasing products and services from a plurality of available products and services and processing corresponding financial transactions in real-time comprising:

a programming transmitter means for broadcasting and updating a plurality of transaction information sets associated with said plurality of available products and services via a first communication channel, said first communication channel having a plurality of subchannels, said subchannels each transmitting a corresponding transaction information set in said first communication channel;

a receiver unit serving a user for simultaneously receiving identical transaction information sets broadcast in subchannels from the programming transmitter means, and including means for selecting, storing and then displaying a desired information set from the broadcast information sets simultaneously received within the receiver unit and to select a desired transaction, said receiver unit including means for receiving programming selection and financial information signals from a remote control device,

means forming a second communication channel originating at the receiver unit and through which financial

information of the user is transmitted to a desired destination so as to authorize the desired transaction in real time for the selected products and services, and wherein

said remote control device comprising,
a manually actuatable keypad,
control means operatively connected to said manually actuatable keypad for receiving data entered manually on the keypad corresponding to desired programming selections in the receiver unit,
means for storing financial information of the user, and
transmitter means operatively connected to said control means for

- a) transmitting the desired programming selections to the receiver unit corresponding to a selected keypad sequence so as to choose the desired programming and interact with the receiver unit, and
b) transmitting the financial information of the user to the receiver unit to authorize a desired transaction in real time.

34. The system according to claim 33 wherein said keypad includes means for activating a scrolling function within the receiver unit for scrolling through individual transaction information sets.

35. The system according to claim 33 wherein said means for storing financial information of said user includes a slot for wiping a card containing the financial information of the user.

36. The system according to claim 35 wherein said slot comprises a magnetic-strip/IC reader.

37. The system according to claim 33 wherein said storage means includes long term storing means for storing financial information of the user for subsequent transactions.

38. The system according to claim 37 wherein said long term storage means comprises an EEPROM.

39. The system according to claim 33 wherein said keypad comprises a qwerty keypad.

40. The system according to claim 33 wherein said receiver unit includes means connecting to a phone line of the central office, and wherein said remote control device comprises the handset of a phone, wherein phone numbers are dialed from the keypad of said remote control device, said remote control device including means for transmitting and receiving phone messages and data between the remote control device and the receiver unit.

41. The system according to claim 40 wherein said remote control device includes switching means for switching between use as a phone handset and use as a controller for interaction with the receiver unit.

42. The system according to claim 33 wherein said receiver unit includes means for selecting normal television channels and said remote control device includes switch means for switching between keypad selection of television channels and keypad selection of subchannels of the transaction information sets.

43. The system according to claim 33 wherein said transaction information sets further comprises a plurality of prompting data corresponding to a product or service for prompting users to make a selection.

44. The system according to claim 43 wherein said set of transaction information sets further comprises:

a plurality of graphic information corresponding to the desired product or service.

45. The system according to claim 33 wherein said first communication channel comprises:

a satellite uplink/downlink transmission between said programming transmitter and one operator means for receiving and transmitting information; and

a broadcast channel from said operator means to said receiver unit.

46. The system according to claim 33 wherein said second communication channel is a phone line.

47. The system according to claim 33 further comprising means for transmitting an authorizing signal to a financial institution, said financial institution making payments to vendors or service providers.

48. The system according to claim 44 wherein said receiver unit is connected to a television set, said graphic information and said prompting data being displayed on said television set.

49. A transactional processing system according to claim 33 wherein said programming transmitter means includes RAM for storing information for transmission.

50. A remote control device for use with a transactional processing system having a receiver unit that receives information from a programming source over a communication channel, said receiver unit also including means for receiving and selecting desired programming selections, said remote control device comprising:

a housing forming an enclosure;

a manually actuable keypad mounted on the housing, control means mounted in the enclosure and operatively connected to said manually actuable keypad for receiving selected input data entered manually on the keypad corresponding to said desired programming selections that are provided to said receiver unit by said programming source;

means for storing financial information from a user of said remote control device; and

transmitter means operatively connected to said control means for:

a) transmitting desired programming selection to said receiver unit corresponding to a selected keypad sequence so as to choose a desired programming and interact therewith through the manually actuable keypad, and

b) transmitting the financial information to the receiver unit, said receiver unit transmitting said financial information on a selected communication channel to authorize a desired transaction corresponding to a desired programming selection.

51. A remote control device for use with a transactional processing system having a receiver unit that receives information from a programming source over a communication channel, said receiver unit also including means for receiving and selecting desired programming selections, said remote control device comprising:

a housing forming an enclosure;

a manually actuable keypad mounted on the housing, control means mounted in the enclosure and operatively connected to said manually actuable keypad for receiving selected input data entered manually on the keypad corresponding to said desired programming selections that are provided to said receiver unit by said programming source;

means for inserting financial information from a user of said remote control device;

means for storing financial information of the user; and transmitter means operatively connected to said control means for:

a) transmitting desired programming selections to said receiver unit corresponding to a selected keypad sequence so as to choose a desired programming and interact therewith through the manually actuable keypad, and

b) transmitting the financial information to the receiver unit, said receiver unit transmitting said financial information on a selected communication channel to authorize a desired transaction corresponding to a desired programming selection.

52. A remote control device for use with a transactional processing system having a receiver unit that receives information from a programming source over a communication channel, said receiver unit also including means for receiving and selecting desired programming selections, said remote control device comprising:

a housing forming an enclosure;

a manually actuable keypad mounted on the housing, control means mounted in the enclosure and operatively connected to said manually actuable keypad for receiving selected input data entered manually on the keypad corresponding to said desired programming selections that are provided to said receiver unit by said programming source;

input device which allows financial information from a user of said remote control device to be retrieved;

means for storing financial information of the user; and transmitter means operatively connected to said control means for:

a) transmitting desired programming selections to said receiver unit corresponding to a selected keypad sequence so as to choose a desired programming and interact therewith through the manually actuable keypad, and

b) transmitting the financial information to the receiver unit, said receiver unit transmitting said financial information on a selected communication channel to authorize a desired transaction corresponding to a desired programming selection.

53. The remote control device of claim 52, wherein said input device is a slot for wiping a card containing the financial information of the user.

54. In a cable system, a remote control device for use with a transactional processing system having a receiving unit that receives information from a programming source over a communication channel, said receiver unit also including means for receiving and selecting desired programming selections, said remote control device comprising:

a housing forming an enclosure;

a manually actuable keypad mounted on the housing; control means mounted in the enclosure and operatively connected to said manually actuable keypad for receiving selected input data entered manually on the keypad corresponding to said desired programming selections that are provided to said receiver unit by said programming source;

means for receiving financial information from a user of said remote control device; and

transmitter means operatively connected to said control means for:

a) transmitting desired programming selections to said receiver unit corresponding to a selected keypad sequence so as to choose a desired programming and interact therewith through the manually actuable keypad, and

b) transmitting the financial information to the receiver unit, said receiver unit transmitting said financial information on a selected communication channel to authorize a desired transaction corresponding to a desired programming selection.

UNITED STATES DISTRICT COURT, CENTRAL DISTRICT CALIFORNIA
CIVIL COVER SHEET

I (a) PLAINTIFFS (Check box if you are representing yourself <input type="checkbox"/> OLMPIC DEVELOPMENTS AG, LLC	DEFENDANTS MICROSOFT CORPORATION, NINTENDO OF AMERICA, INC, SONY COMPUTER ENTERTAINMENT OF AMERICA, LLC, VALVE CORPORATION
(b) Attorneys (Firm Name, Address and Telephone Number. If you are representing yourself, provide same.) Steven W. Ritcheson, White Field, Inc., 818-882-1030 9800 D. Topanga Canyon Blvd. #347 Chatsworth, CA 91311	Attorneys (If Known)

II. BASIS OF JURISDICTION (Place an X in one box only.) <input type="checkbox"/> 1 U.S. Government Plaintiff <input checked="" type="checkbox"/> 3 Federal Question (U.S. Government Not a Party) <input type="checkbox"/> 2 U.S. Government Defendant <input type="checkbox"/> 4 Diversity (Indicate Citizenship of Parties in Item III)	III. CITIZENSHIP OF PRINCIPAL PARTIES - For Diversity Cases Only (Place an X in one box for plaintiff and one for defendant.) <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:30%;"></td> <td style="width:10%;">PTF</td> <td style="width:10%;">DEF</td> <td style="width:40%;"></td> <td style="width:10%;">PTF</td> <td style="width:10%;">DEF</td> </tr> <tr> <td>Citizen of This State</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 1</td> <td>Incorporated or Principal Place of Business in this State</td> <td><input type="checkbox"/> 4</td> <td><input type="checkbox"/> 4</td> </tr> <tr> <td>Citizen of Another State</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 2</td> <td>Incorporated and Principal Place of Business in Another State</td> <td><input type="checkbox"/> 5</td> <td><input type="checkbox"/> 5</td> </tr> <tr> <td>Citizen or Subject of a Foreign Country</td> <td><input type="checkbox"/> 3</td> <td><input type="checkbox"/> 3</td> <td>Foreign Nation</td> <td><input type="checkbox"/> 6</td> <td><input type="checkbox"/> 6</td> </tr> </table>		PTF	DEF		PTF	DEF	Citizen of This State	<input type="checkbox"/> 1	<input type="checkbox"/> 1	Incorporated or Principal Place of Business in this State	<input type="checkbox"/> 4	<input type="checkbox"/> 4	Citizen of Another State	<input type="checkbox"/> 2	<input type="checkbox"/> 2	Incorporated and Principal Place of Business in Another State	<input type="checkbox"/> 5	<input type="checkbox"/> 5	Citizen or Subject of a Foreign Country	<input type="checkbox"/> 3	<input type="checkbox"/> 3	Foreign Nation	<input type="checkbox"/> 6	<input type="checkbox"/> 6
	PTF	DEF		PTF	DEF																				
Citizen of This State	<input type="checkbox"/> 1	<input type="checkbox"/> 1	Incorporated or Principal Place of Business in this State	<input type="checkbox"/> 4	<input type="checkbox"/> 4																				
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Citizen or Subject of a Foreign Country	<input type="checkbox"/> 3	<input type="checkbox"/> 3	Foreign Nation	<input type="checkbox"/> 6	<input type="checkbox"/> 6																				

IV. ORIGIN (Place an X in one box only.)

1 Original Proceeding
 2 Removed from State Court
 3 Remanded from Appellate Court
 4 Reinstated or Reopened
 5 Transferred from another district (specify):
 6 Multi-District Litigation
 7 Appeal to District Judge from Magistrate Judge

V. REQUESTED IN COMPLAINT: JURY DEMAND: Yes No (Check 'Yes' only if demanded in complaint.)

CLASS ACTION under F.R.C.P. 23: Yes No **MONEY DEMANDED IN COMPLAINT: \$** TBD

VI. CAUSE OF ACTION (Cite the U.S. Civil Statute under which you are filing and write a brief statement of cause. Do not cite jurisdictional statutes unless diversity.)

35 USC 271 et seq. - patent infringement

VII. NATURE OF SUIT (Place an X in one box only.)

OTHER STATUTES <input type="checkbox"/> 400 State Reapportionment <input type="checkbox"/> 410 Antitrust <input type="checkbox"/> 430 Banks and Banking <input type="checkbox"/> 450 Commerce/ICC Rates/etc. <input type="checkbox"/> 460 Deportation <input type="checkbox"/> 470 Racketeer Influenced and Corrupt Organizations <input type="checkbox"/> 480 Consumer Credit <input type="checkbox"/> 490 Cable/Sat TV <input type="checkbox"/> 810 Selective Service <input type="checkbox"/> 850 Securities/Commodities/Exchange <input type="checkbox"/> 875 Customer Challenge 12 USC 3410 <input type="checkbox"/> 890 Other Statutory Actions <input type="checkbox"/> 891 Agricultural Act <input type="checkbox"/> 892 Economic Stabilization Act <input type="checkbox"/> 893 Environmental Matters <input type="checkbox"/> 894 Energy Allocation Act <input type="checkbox"/> 895 Freedom of Info. Act <input type="checkbox"/> 900 Appeal of Fee Determination Under Equal Access to Justice <input type="checkbox"/> 950 Constitutionality of State Statutes	CONTRACT <input type="checkbox"/> 110 Insurance <input type="checkbox"/> 120 Marine <input type="checkbox"/> 130 Miller Act <input type="checkbox"/> 140 Negotiable Instrument <input type="checkbox"/> 150 Recovery of Overpayment & Enforcement of Judgment <input type="checkbox"/> 151 Medicare Act <input type="checkbox"/> 152 Recovery of Defaulted Student Loan (Excl. Veterans) <input type="checkbox"/> 153 Recovery of Overpayment of Veteran's Benefits <input type="checkbox"/> 160 Stockholders' Suits <input type="checkbox"/> 190 Other Contract <input type="checkbox"/> 195 Contract Product Liability <input type="checkbox"/> 196 Franchise REAL PROPERTY <input type="checkbox"/> 210 Land Condemnation <input type="checkbox"/> 220 Foreclosure <input type="checkbox"/> 230 Rent Lease & Ejectment <input type="checkbox"/> 240 Torts to Land <input type="checkbox"/> 245 Tort Product Liability <input type="checkbox"/> 290 All Other Real Property	TORTS PERSONAL INJURY <input type="checkbox"/> 310 Airplane <input type="checkbox"/> 315 Airplane Product Liability <input type="checkbox"/> 320 Assault, Libel & Slander <input type="checkbox"/> 330 Fed. Employers' Liability <input type="checkbox"/> 340 Marine <input type="checkbox"/> 345 Marine Product Liability <input type="checkbox"/> 350 Motor Vehicle <input type="checkbox"/> 355 Motor Vehicle Product Liability <input type="checkbox"/> 360 Other Personal Injury <input type="checkbox"/> 362 Personal Injury-Med Malpractice <input type="checkbox"/> 365 Personal Injury-Product Liability <input type="checkbox"/> 368 Asbestos Personal Injury Product Liability IMMIGRATION <input type="checkbox"/> 462 Naturalization Application <input type="checkbox"/> 463 Habeas Corpus-Alien Detainee <input type="checkbox"/> 465 Other Immigration Actions	TORTS PERSONAL PROPERTY <input type="checkbox"/> 370 Other Fraud <input type="checkbox"/> 371 Truth in Lending <input type="checkbox"/> 380 Other Personal Property Damage <input type="checkbox"/> 385 Property Damage Product Liability BANKRUPTCY <input type="checkbox"/> 422 Appeal 28 USC 158 <input type="checkbox"/> 423 Withdrawal 28 USC 157 CIVIL RIGHTS <input type="checkbox"/> 441 Voting <input type="checkbox"/> 442 Employment <input type="checkbox"/> 443 Housing/Accommodations <input type="checkbox"/> 444 Welfare <input type="checkbox"/> 445 American with Disabilities - Employment <input type="checkbox"/> 446 American with Disabilities - Other <input type="checkbox"/> 440 Other Civil Rights	PRISONER PETITIONS <input type="checkbox"/> 510 Motions to Vacate Sentence Habeas Corpus <input type="checkbox"/> 530 General <input type="checkbox"/> 535 Death Penalty <input type="checkbox"/> 540 Mandamus/Other <input type="checkbox"/> 550 Civil Rights <input type="checkbox"/> 555 Prison Condition FORFEITURE / PENALTY <input type="checkbox"/> 610 Agriculture <input type="checkbox"/> 620 Other Food & Drug <input type="checkbox"/> 625 Drug Related Seizure of Property 21 USC 881 <input type="checkbox"/> 630 Liquor Laws <input type="checkbox"/> 640 R.R. & Truck <input type="checkbox"/> 650 Airline Regs <input type="checkbox"/> 660 Occupational Safety /Health <input type="checkbox"/> 690 Other	LABOR <input type="checkbox"/> 710 Fair Labor Standards Act <input type="checkbox"/> 720 Labor/Mgmt. Relations <input type="checkbox"/> 730 Labor/Mgmt. Reporting & Disclosure Act <input type="checkbox"/> 740 Railway Labor Act <input type="checkbox"/> 790 Other Labor Litigation <input type="checkbox"/> 791 Empl. Ret. Inc. Security Act PROPERTY RIGHTS <input type="checkbox"/> 820 Copyrights <input checked="" type="checkbox"/> 830 Patent <input type="checkbox"/> 840 Trademark SOCIAL SECURITY <input type="checkbox"/> 861 SSID Title XVI <input type="checkbox"/> 862 Black Lung (923) <input type="checkbox"/> 863 DIWC/DIWW (405(g)) <input type="checkbox"/> 864 SSID Title XVI <input type="checkbox"/> 865 RSI (405(g)) FEDERAL TAX SUITS <input type="checkbox"/> 870 Taxes (U.S. Plaintiff or Defendant) <input type="checkbox"/> 871 IRS-Third Party 26 USC 7609
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FOR OFFICE USE ONLY: Case Number: CV 10 8874

AFTER COMPLETING THE FRONT SIDE OF FORM CV-71, COMPLETE THE INFORMATION REQUESTED BELOW.

**UNITED STATES DISTRICT COURT, CENTRAL DISTRICT OF CALIFORNIA
CIVIL COVER SHEET**

VIII(a). IDENTICAL CASES: Has this action been previously filed in this court and dismissed, remanded or closed? No Yes

If yes, list case number(s): _____

VIII(b). RELATED CASES: Have any cases been previously filed in this court that are related to the present case? No Yes

If yes, list case number(s): CV10-7237-GW (PLAx) and CV10 - 8545 - CAS (JC)

Civil cases are deemed related if a previously filed case and the present case:

- (Check all boxes that apply) A. Arise from the same or closely related transactions, happenings, or events, or
- B. Call for determination of the same or substantially related or similar questions of law and fact, or
- C. For other reasons would entail substantial duplication of labor if heard by different judges, or
- D. Involve the same patent, trademark or copyright, and one of the factors identified above in a, b or c also is present

IX. VENUE: (When completing the following information, use an additional sheet if necessary.)

(a) List the County in this District, California County outside of this District, State if other than California, or Foreign Country, in which **EACH** named plaintiff resides.
 Check here if the government, its agencies or employees is a named plaintiff. If this box is checked, go to item (b).

County in this District *	California County outside of this District, State, if other than California, or Foreign Country
	Delaware

(b) List the County in this District, California County outside of this District, State if other than California, or Foreign Country, in which **EACH** named defendant resides.
 Check here if the government, its agencies or employees is a named defendant. If this box is checked, go to item (c).

County in this District *	California County outside of this District, State, if other than California, or Foreign Country
	San Mateo, Washington, Texas

(c) List the County in this District, California County outside of this District, State if other than California, or Foreign Country, in which **EACH** claim arose.

Note: In land condemnation cases, use the location of the tract of land involved.

County in this District *	California County outside of this District, State, if other than California, or Foreign Country
Los Angeles	

* Los Angeles, Orange, San Bernardino, Riverside, Ventura, Santa Barbara, or San Luis Obispo Counties

Note: In land condemnation cases, use the location of the tract of land involved.

X SIGNATURE OF ATTORNEY (OR PROPER) _____

Date 11-18-10

Notice to Counsel/Parties: The CV-71 (JS-44) Civil Cover Sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law. This form, approved by the Judicial Conference of the United States in September 1974, is required pursuant to Local Rule 3-1, is not filed but is used by the Clerk of the Court for the purpose of statistics, venue and initiating the civil docket sheet. (For more detailed instructions, see separate instructions sheet.)

Key to Statistical codes relating to Social Security Cases

Nature of Suit Code	Abbreviation	Substantive Statement of Cause of Action
861	HIA	All claims for health insurance benefits (Medicare) under Title 18, Part A, of the Social Security Act, as amended. Also, include claims by hospitals, skilled nursing facilities, etc., for certification as providers of services under the program. (42 U.S.C. 1935H(b))
862	BL	All claims for "Black Lung" benefits under Title 4, Part B, of the Federal Coal Mine Health and Safety Act of 1969. (30 U.S.C. 923)
863	DIWC	All claims filed by insured workers for disability insurance benefits under Title 2 of the Social Security Act, as amended, plus all claims filed for child's insurance benefits based on disability. (42 U.S.C. 405(g))
863	DIWW	All claims filed for widows or widowers insurance benefits based on disability under Title 2 of the Social Security Act, as amended. (42 U.S.C. 405(g))
864	SSID	All claims for supplemental security income payments based upon disability filed under Title 16 of the Social Security Act, as amended.
865	RSI	All claims for retirement (old age) and survivors benefits under Title 2 of the Social Security Act, as amended. (42 U.S.C. (g))