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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/886,429	09/10/2013	8529336	443,773-051 (240D1)	1557

34263 7590 08/21/2013
O'Melveny & Myers LLP
IP&T Calendar Department LA-1005D
400 South Hope Street
Los Angeles, CA 90071-2899

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment is 214 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

Randall M. Katz, Beverly Hills, CA;
Gary Dawson, West Lake Village, CA;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 or **Fax** (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

34263 7590 06/19/2013
 O'Melveny & Myers LLP
 IP&T Calendar Department LA-13-A7
 400 South Hope Street
 Los Angeles, CA 90071-2899

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

Via EFS	(Depositor's name)
Shirley L. Carr	(Signature)
8-12-13	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/886,429	09/20/2010	Randall M. Katz	443,773-051 (240D1)	1557

TITLE OF INVENTION: APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$890	\$300	\$0	\$1190	09/19/2013

EXAMINER	ART UNIT	CLASS-SUBCLASS
COBURN, CORBETT B	3714	463-017000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.	1 David B. Murphy 2 O'Melveny & Myers 3
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3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE MILESTONE ENTERTAINMENT LLC
 (B) RESIDENCE: (CITY and STATE OR COUNTRY) BEVERLY HILLS, CALIFORNIA, USA

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☒ Issue Fee
☒ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☒ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number 50-2862 (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

- ☐ Applicant certifying micro entity status. See 37 CFR 1.29
- ☐ Applicant asserting small entity status. See 37 CFR 1.27
- ☐ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see form PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature David B. Murphy

Date 7/26/13

Typed or printed name David b. Murphy

Registration No. 31,125

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Electronic Patent Application Fee Transmittal				
Application Number:		12886429		
Filing Date:		20-Sep-2010		
Title of Invention:		APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT		
First Named Inventor/Applicant Name:		Randall M. Katz		
Filer:		David B. Murphy/Saundra Carr		
Attorney Docket Number:		443,773-051 (240D1)		
Filed as Small Entity				
Utility under 35 USC 111(a) Filing Fees				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Basic Filing:				
Basic Filing:				
Miscellaneous-Filing:				
Basic Filing:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Utility Appl Issue Fee	2501	1	890	890
Publ. Fee- Early, Voluntary, or Normal	1504	1	300	300

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Extension-of-Time:				
Total in USD (\$)				1190

Electronic Acknowledgement Receipt

EFS ID:	16561607
Application Number:	12886429
International Application Number:	
Confirmation Number:	1557
Title of Invention:	APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT
First Named Inventor/Applicant Name:	Randall M. Katz
Customer Number:	1557
Filer:	David B. Murphy/Saundra Carr
Filer Authorized By:	David B. Murphy
Attorney Docket Number:	443,773-051 (240D1)
Receipt Date:	12-AUG-2013
Filing Date:	20-SEP-2010
Time Stamp:	12886429
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$ 1190
RAM confirmation Number	yes
Deposit Account	502862
Authorized User	yes
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees) Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)	

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	-51Fee.pdf	124863	no	2
			02ef855a06a97cf0561ccde70cab02f9dd6ba76c		

Warnings:

Information:

2	Fee Worksheet (SB06)	fee-info.pdf	32166	no	2
			f82cbb32a146c1be822674dc7efe88cf092d3baa		

Warnings:

Information:

Total Files Size (in bytes):			157029
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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



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NOTICE OF ALLOWANCE AND FEE(S) DUE

34263 7590 06/19/2013
O'Melveny & Myers LLP
IP&T Calendar Department LA-13-A7
400 South Hope Street
Los Angeles, CA 90071-2899

EXAMINER

COBURN, CORBETT B

ART UNIT

PAPER NUMBER

3714

DATE MAILED: 06/19/2013

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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12/886,429

09/20/2010

Randall M. Katz

443,773-051 (240D1)

1557

TITLE OF INVENTION: APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS
IN AN ELECTRONIC ENVIRONMENT

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$890	\$300	\$0	\$1190	09/19/2013

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
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or Fax (571)-273-2885**

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CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

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34263 7590 06/19/2013
O'Melveny & Myers LLP
IP&T Calendar Department LA-13-A7
400 South Hope Street
Los Angeles, CA 90071-2899

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Signature)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/886,429	09/20/2010	Randall M. Katz	443,773-051 (240D1)	1557

TITLE OF INVENTION: APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT

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EXAMINER	ART UNIT	CLASS-SUBCLASS
COBURN, CORBETT B	3714	463-017000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. <div> 1 _____ 2 _____ 3 _____ </div>
---	---

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

- ☐ Applicant certifying micro entity status. See 37 CFR 1.29
- ☐ Applicant asserting small entity status. See 37 CFR 1.27
- ☐ Applicant changing to regular undiscounted fee status.

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NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/886,429	09/20/2010	Randall M. Katz	443,773-051 (240D1)	1557

34263 7590 06/19/2013
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IP&T Calendar Department LA-13-A7
400 South Hope Street
Los Angeles, CA 90071-2899

EXAMINER

COBURN, CORBETT B

ART UNIT	PAPER NUMBER
----------	--------------

3714

DATE MAILED: 06/19/2013

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 214 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 214 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 12/886,429	Applicant(s) KATZ ET AL.	
	Examiner CORBETT B. COBURN	Art Unit 3714	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to TD.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are 10-12 and 17-117. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) ☐ All b) ☐ Some *c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Interim copies:

- a) ☐ All b) ☐ Some c) ☐ None of the: Interim copies of the priority documents have been received.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. ☐ Notice of References Cited (PTO-892) 2. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material 4. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____ | <ol style="list-style-type: none"> 5. ☒ Examiner's Amendment/Comment 6. ☒ Examiner's Statement of Reasons for Allowance 7. ☐ Other _____ |
|--|--|

/CORBETT B COBURN/
Primary Examiner, Art Unit 3714

DETAILED ACTION

Election/Restrictions

1. This application is in condition for allowance except for the presence of claims 1-9 & 13-16 directed to inventions non-elected without traverse. Accordingly, claims 1-9 & 13-16 have been cancelled.

Examiner's Amendment

2. Cancel Claims 1-9 & 13-16.

Allowable Subject Matter

3. Claims 10-12 & 17-117 are allowed.
4. The following is an examiner's statement of reasons for allowance: See Terminal Disclaimers.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Terminal Disclaimer

5. The terminal disclaimers filed on 29 May 2013 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patents Numbered 8,241,110 & 7,798,896 have been reviewed and is accepted. The terminal disclaimers have been recorded.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CORBETT B. COBURN whose telephone number is (571)272-4447. The examiner can normally be reached on 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Lewis can be reached on (571) 272-7673. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CORBETT B COBURN/
Primary Examiner
Art Unit 3714

EAST Search History

EAST Search History (Prior Art)

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S3	9	("20110218025" "20120058807" "20120303329" "6424703" "7967292" "8241100" "8241110" "8376826" "8393946").PN.	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:16
S4	12	lottery & mandated adj parameters & variable adj parameters	US-PGPUB;	OR	OFF	2013/06/05 13:42

			USPAT			
S5	5249	(463/25).CCLS.	US- PGPUB; USPAT; USOCR	OR	OFF	2013/06/05 13:44

6/ 6/ 2013 1:09:17 PM**C:\ Users\ ccoburn\ Documents\ EAST\ Workspaces\ 12886429.wsp**

EAST Search History

EAST Search History (Prior Art)

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		"8393946").PN.					
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6/ 5/ 2013 1:45:09 PM

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Issue Classification 	Application/Control No. 12886429	Applicant(s)/Patent Under Reexamination KATZ ET AL.
	Examiner CORBETT B COBURN	Art Unit 3714

CPC		
Symbol	Type	Version

CPC Combination Sets				
Symbol	Type	Set	Ranking	Version

US ORIGINAL CLASSIFICATION		INTERNATIONAL CLASSIFICATION									
CLASS	SUBCLASS	CLAIMED					NON-CLAIMED				
463	25	A	6	3	F	9 / 24 (2006.0)					
CROSS REFERENCE(S)											
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)										
463	17										

NONE		Total Claims Allowed:	
(Assistant Examiner)		104	
/CORBETT B COBURN/ Primary Examiner.Art Unit 3714		O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)		1	2

Issue Classification 	Application/Control No. 12886429	Applicant(s)/Patent Under Reexamination KATZ ET AL.
	Examiner CORBETT B COBURN	Art Unit 3714

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☒ T.D. ☐ R.1.47															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
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21	34	74	62	74	43	71	2	71	71	71	71	2	71	71	2
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NONE (Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 104	
/CORBETT B COBURN/ Primary Examiner. Art Unit 3714 (Primary Examiner) _____ (Date) _____		6 Jun 14 (Date) _____	O.G. Print Claim(s) 1
			O.G. Print Figure 2

Search Notes 	Application/Control No. 12886429	Applicant(s)/Patent Under Reexamination KATZ ET AL.
	Examiner CORBETT B COBURN	Art Unit 3714

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
463	17, 25		

SEARCH NOTES		
Search Notes	Date	Examiner
See attached	27 Nov 12	CBC
See attached	6 Jun 13	CBC

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
463	17, 25	6 Jun 13	CBC

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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	11	prize & network & game & trivia & contest & arcade	USPAT	OR	OFF	2013/06/05 13:20
L2	101	prize & network & game & trivia & contest	USPAT	OR	OFF	2013/06/05 13:20
L3	408	prize & network & game & contest	USPAT	OR	OFF	2013/06/05 13:20
L4	823	prize & network & game & redemption	USPAT	OR	OFF	2013/06/05 13:20
L5	95	prize & network & game & redemption & arcade	USPAT	OR	OFF	2013/06/05 13:20
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L8	10	koza.in. & lottery	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L9	1	L8 & book	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L10	0	kamille.in. & lottery & book	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
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L18	3	("5271626" "6749198" "6811484").PN.	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L19	1	("5417424").PN.	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L20	4	lottery & "guaranteed prize structure"	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L21	9	lottery & guaranteed near structure	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L22	17	lottery & guarantee\$ near structure	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L23	9	lottery & guaranteed near structure	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L24	144	lottery & guaranteed same structure	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L25	16	destiny adj code & lottery	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L26	1	("5,317,135").PN.	USPAT	OR	OFF	2013/06/05 13:20
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L31	3873	slot adj machine & processor & (paytable pay adj table)	US- PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L32	323	L31 & virtual adj reel	US- PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L33	1	("4448419").PN.	USPAT	OR	OFF	2013/06/05 13:20
L34	10	koza.in. & lottery	US- PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L35	2	L34 & guarantee\$	US- PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L36	178	walker.in. & parameters & slot adj machine	USPAT	OR	OFF	2013/06/05 13:20
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L38	2396	slot adj machine & internet	USPAT	OR	OFF	2013/06/05 13:20
L39	76	slot adj machine & confirmation adj number	US- PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L40	59	L39 & receipt	US- PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L41	1443	slot adj machine & cashless & voucher	US- PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L42	355	slot adj machine & cashless & voucher & barcode	US- PGPUB; USPAT	OR	OFF	2013/06/05 13:20
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L46	37	slot adj machine & gleps	US- PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L47	4	slot adj machine & guarantee near prize	US- PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L48	281	lottery & scratch & slot adj machine	USPAT	OR	OFF	2013/06/05 13:20
L49	6	("5709603" "5772511" "6113098" "6244595" "6251014" "6322446").PN.	US- PGPUB; USPAT; USOCR	OR	OFF	2013/06/05 13:20
L50	823	Kelly & game & prize & ticket	US- PGPUB; USPAT; USOCR	OR	OFF	2013/06/05 13:20
L51	43	Kelly.in. & game & prize & ticket	USPAT	OR	OFF	2013/06/05 13:20
L52	2	slot adj machine & audit adj trail & confirmation adj number	USPAT	OR	OFF	2013/06/05 13:20
L53	99	slot adj machine & audit adj trail	USPAT	OR	OFF	2013/06/05 13:20
L54	21	slot adj machine & confirmation adj number	USPAT	OR	OFF	2013/06/05 13:20
L55	180	slot adj machine & validation adj number	USPAT	OR	OFF	2013/06/05 13:20
L56	2	((("5342921") or ("7309280"))).PN.	USPAT	OR	OFF	2013/06/05 13:20
L57	11	prize & network & game & trivia & contest & arcade	USPAT	OR	OFF	2013/06/05 13:20
L58	101	prize & network & game & trivia & contest	USPAT	OR	OFF	2013/06/05 13:20
L59	408	prize & network & game & contest	USPAT	OR	OFF	2013/06/05

						13:20
L60	823	prize & network & game & redemption	USPAT	OR	OFF	2013/06/05 13:20
L61	95	prize & network & game & redemption & arcade	USPAT	OR	OFF	2013/06/05 13:20
L62	2	"20040259631"	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L63	1	"5,816,918".pn.	USPAT	OR	OFF	2013/06/05 13:20
L64	10	koza.in. & lottery	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L65	1	L64 & book	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L66	0	kamille.in. & lottery & book	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L67	1572	lottery & book & ticket	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L68	56	("20010019193" "3873092" "4348027" "4772025" "4836546" "4883278" "5035422" "5074566" "5112050" "5157602" "5317135" "5407199" "5409234" "5472196" "5475205" "5513852" "5518253" "5628684" "5643088" "5651735" "5685541" "5721583" "5772510" "5785315" "5791990" "5813913" "5909875" "5931467" "5935001" "5936661" "5949042" "6048268" "6102395" "6102400" "6193610" "6203011" "6238288" "6241246" "6241606" "6250685" "6267376" "6273817" "6290600" "6309298" "6312334" "6322446" "6354593" "6382627" "6475085" "6491215" "6497408" "6547242" "D387390" "D420057" "D444507" "RE37371").PN.	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L69	62	Lottery & GLEPS	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L70	2	("5569082" "6251017").PN.	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L71	8	("20030060257" "20030060261" "20030102825" "5269521" "5620182" "5857175" "6488280" "6565084").PN.	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L72	8	("20020090986" "20020151344" "20030045340" "20030060276" "5709603" "5871398" "6514144" "6607439").PN.	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L73	1	("6749500").PN.	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L74	3	("5271626" "6749198" "6811484").PN.	US-PGPUB;	OR	OFF	2013/06/05 13:20

			USPAT			
L75	1	("5417424").PN.	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L76	4	lottery & "guaranteed prize structure"	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L77	9	lottery & guaranteed near structure	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L78	17	lottery & guarantee\$ near structure	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L79	9	lottery & guaranteed near structure	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L80	144	lottery & guaranteed same structure	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L81	16	destiny adj code & lottery	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L82	1	("5,317,135").PN.	USPAT	OR	OFF	2013/06/05 13:20
L83	1	("5317135").PN.	USPAT	OR	OFF	2013/06/05 13:20
L84	0	(("20010019193" "20020090986" "20020151344" "20030045340" "20030060257" "20030060261" "20030060276" "20030102825" "3873092" "4348027" "4582324" "4772025" "4836546" "4883278" "5035422" "5074566" "5112050" "5157602" "5269521" "5271626" "5317135" "5407199" "5409234" "5417424" "5472196" "5475205" "5513852" "5518253" "5569082" "5620182" "5628684" "5643088" "5651735" "5685541" "5709603" "5721583" "5772510" "5785315" "5791990" "5813913" "5855514" "5857175" "5871398" "5909875" "5931467" "5935001" "5936661" "5949042" "6048268" "6102395" "6102400" "6193610" "6203011" "6238288" "6241246" "6241606" "6250685" "6251017" "6267376" "6273817" "6290600" "6309298" "6312334" "6322446" "6354593" "6382627" "6475085" "6488280" "6491215" "6497408" "6514144" "6547242" "6565084" "6607439" "6749193" "6749500" "6811484" "D387390" "D420057" "D444507" "RE37371").PN.).PN.	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L85	81	(("20010019193" "20020090986" "20020151344" "20030045340" "20030060257" "20030060261" "20030060276" "20030102825" "3873092" "4348027" "4582324" "4772025"	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20

		"4836546" "4883278" "5035422" "5074566" "5112050" "5157602" "5269521" "5271626" "5317135" "5407199" "5409234" "5417424" "5472196" "5475205" "5513852" "5518253" "5569082" "5620182" "5628634" "5643088" "5651735" "5685541" "5709603" "5721583" "5772510" "5785315" "5791990" "5813913" "5855514" "5857175" "5871398" "5909875" "5931467" "5935001" "5936661" "5949042" "6048268" "6102395" "6102400" "6193610" "6203011" "6238288" "6241246" "6241606" "6250685" "6251017" "6267376" "6273817" "6290600" "6309298" "6312334" "6322446" "6354593" "6382627" "6475035" "6488280" "6491215" "6497408" "6514144" "6547242" "6565034" "6607439" "6749198" "6749500" "6811484" "D387390" "D420057" "D444507" "RE37371").PN.				
L86	6	("4191376" "4677553" "4725079" "4832341" "4993714" "5317135").PN.	US- PGPUB; USPAT; USOCR	OR	OFF	2013/06/05 13:20
L87	3873	slot adj machine & processor & (paytable pay adj table)	US- PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L88	323	L87 & virtual adj reel	US- PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L89	1	("4448419").PN.	USPAT	OR	OFF	2013/06/05 13:20
L90	10	koza.in. & lottery	US- PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L91	2	L90 & guarantee\$	US- PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L92	178	walker.in. & parameters & slot adj machine	USPAT	OR	OFF	2013/06/05 13:20
L93	1	("6068552").PN.	USPAT	OR	OFF	2013/06/05 13:20
L94	2396	slot adj machine & internet	USPAT	OR	OFF	2013/06/05 13:20
L95	76	slot adj machine & confirmation adj number	US- PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L96	59	L95 & receipt	US- PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L97	1443	slot adj machine & cashless & voucher	US- PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L98	355	slot adj machine & cashless & voucher & barcode	US- PGPUB; USPAT	OR	OFF	2013/06/05 13:20

L99	1	"6488280".pn.	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L100	1	"20040259631"	USPAT	OR	OFF	2013/06/05 13:20
L101	2	"20040259631"	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L102	37	slot adj machine & gleps	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L103	4	slot adj machine & guarantee near prize	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L104	281	lottery & scratch & slot adj machine	USPAT	OR	OFF	2013/06/05 13:20
L105	6	("5709603" "5772511" "6113098" "6244595" "6251014" "6322446").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2013/06/05 13:20
L106	823	Kelly & game & prize & ticket	US-PGPUB; USPAT; USOCR	OR	OFF	2013/06/05 13:20
L107	43	Kelly.in. & game & prize & ticket	USPAT	OR	OFF	2013/06/05 13:20
L108	2	slot adj machine & audit adj trail & confirmation adj number	USPAT	OR	OFF	2013/06/05 13:20
L109	99	slot adj machine & audit adj trail	USPAT	OR	OFF	2013/06/05 13:20
L110	21	slot adj machine & confirmation adj number	USPAT	OR	OFF	2013/06/05 13:20
L111	180	slot adj machine & validation adj number	USPAT	OR	OFF	2013/06/05 13:20
L112	2	((("5842921") or ("7309280"))).PN.	USPAT	OR	OFF	2013/06/05 13:20
L113	0	(463/25&gleps).OCLS.	USPAT	OR	OFF	2013/06/05 13:20
L114	9	463/25.ccls. & gleps	USPAT	OR	OFF	2013/06/05 13:20
L115	11	463/20.ccls. & gleps	USPAT	OR	OFF	2013/06/05 13:20
L116	12	463/16.ccls. & gleps	USPAT	OR	OFF	2013/06/05 13:20
L117	29	463/16.ccls. & gleps	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L118	13	463/20.ccls. & gleps	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L119	16	463/25.ccls. & gleps	US-PGPUB; USPAT	OR	OFF	2013/06/05 13:20
L123	0	463/25.ccls & gleps	USPAT	OR	OFF	2013/06/05 13:38

6/ 5/ 2013 1:40:38 PM

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PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	12/886,429
				Filing Date	September 20, 2010
				First Named Inventor	Randall M. Katz et al
				Group Art Unit	3714
				Examiner Name	Corbett B. Coburn
Sheet	1	of	1	Attorney Docket Number	443,773-51 (US240D1)

U.S. PATENT DOCUMENTS						
Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		US-6,424,703	B1	Katz	07-23-2002	
		US-7,967,292	B2	Katz et al	06-28-2011	
		US-8,241,100	B2	Katz et al	08-14-2012	
		US-8,241,110	B2	Katz et al	08-14-2012	
		US-8,376,826	B2	Katz et al	02-19-2013	
		US-8,393,946	B2	Katz et al	03-12-2013	
		US-2011-0218025	A1	Katz et al	09-08-2011	
		US-2012-0058807	A1	Katz et al	03-08-2012	
		US-2012-0303329	A1	Katz et al	11-29-2012	

FOREIGN PATENT DOCUMENTS							
Examiner Initials *	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office ³	Number ⁴	Kind Code ⁵ (if known)			

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume–issue number(s), publisher, city and/or country where published.	T ²
Examiner Signature	/Corbett Coburn/		Date Considered 06/06/2013

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231

OMM_US:71580142.1

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /C.C./

Application Number 	Application/Control No. 12/886,429	Applicant(s)/Patent under Reexamination KATZ ET AL.	
Document Code - DISQ		Internal Document – DO NOT MAIL	

TERMINAL DISCLAIMER	☒ APPROVED	☐ DISAPPROVED
Date Filed : 5/29/13	This patent is subject to a Terminal Disclaimer	

Approved/Disapproved by:

2 td's
Jean Proctor

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PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	12/886,429
				Filing Date	September 20, 2010
				First Named Inventor	Randall M. Katz et al
				Group Art Unit	3714
				Examiner Name	Corbett B. Coburn
Sheet	1	of	1	Attorney Docket Number	443,773-51 (US240D1)

U.S. PATENT DOCUMENTS						
Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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		US-6,424,703	B1	Katz	07-23-2002	
		US-7,967,292	B2	Katz et al	06-28-2011	
		US-8,241,100	B2	Katz et al	08-14-2012	
		US-8,241,110	B2	Katz et al	08-14-2012	
		US-8,376,826	B2	Katz et al	02-19-2013	
		US-8,393,946	B2	Katz et al	03-12-2013	
		US-2011-0218025	A1	Katz et al	09-08-2011	
		US-2012-0058807	A1	Katz et al	03-08-2012	
		US-2012-0303329	A1	Katz et al	11-29-2012	

FOREIGN PATENT DOCUMENTS							
Examiner Initials *	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office ³	Number ⁴	Kind Code ⁵ (if known)			

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume–issue number(s), publisher, city and/or country where published.	T ²
Examiner Signature		Date Considered	

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

² Unique citation designation number. ³ See attached Kinds of U.S. Patent Documents. ⁴ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁷ Applicant is to place a check mark here if English language Translation is attached.

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Electronic Patent Application Fee Transmittal

Application Number:	12886429			
Filing Date:	20-Sep-2010			
Title of Invention:	APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT			
First Named Inventor/Applicant Name:	Randall M. Katz			
Filer:	David B. Murphy/Saundra Carr			
Attorney Docket Number:	443,773-051 (240D1)			
Filed as Small Entity				
Utility under 35 USC 111(a) Filing Fees				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Basic Filing:				
Basic Filing:				
Miscellaneous-Filing:				
Basic Filing:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Submission- Information Disclosure Stmt	2806	1	2006	90
Total in USD (\$)				90

Electronic Acknowledgement Receipt

EFS ID:	15909454
Application Number:	15909454
International Application Number:	
Confirmation Number:	1557
Title of Invention:	APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT
First Named Inventor/Applicant Name:	Randall M. Katz
Customer Number:	1557
Filer:	David B. Murphy/Saundra Carr
Filer Authorized By:	David B. Murphy
Attorney Docket Number:	443,773-051 (240D1)
Receipt Date:	30-MAY-2013
Filing Date:	20-SEP-2010
Time Stamp:	1557
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	yes
RAM confirmation Number	yes
Deposit Account	502862
Authorized User	yes

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	-51IDS.pdf	128949	no	3
			487d26317faa79fa54fddde262f51375475567991		

Warnings:

Information:

2	Information Disclosure Statement (IDS) Form (SB08)	-51SB08.pdf	86870	no	1
			946896e27e4a326a3d2a39567978e0437ca6eb62		

Warnings:

Information:

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3	Fee Worksheet (SB06)	fee-info.pdf	30857	no	2
			2d20ba70cf1ef0fa02a791f3de7f617959918b86		

Warnings:

Information:

Total Files Size (in bytes):	246676
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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

RANDALL M. KATZ, et al.

Serial No.: 12/886,429

Filed: September 20, 2010

For: APPARATUS, SYTEMS AND
METHODS FOR IMPLEMENTING
ENHANCED GAMING AND PRIZING
PARAMETERS IN AN ELECTRONIC
ENVIRONMENT

Group Art Unit 3714

Examiner: Corbett B. Coburn

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with 37 CFR §§ 1.97 and 1.98, the items identified in this Information Disclosure Statement ("IDS") are brought to the attention of the Office. The accompanying Form PTO/SB/08a provides a listing of documents that may be relevant to the subject application.

The items identified in this IDS may or may not be "material" pursuant to 37 CFR § 1.56. The submission thereof by Applicant is not to be construed as an admission that any such patent, publication or other information referred to therein is material or considered to be material (37 CFR § 1.97(h)), or even qualifies as "prior art" under 35 USC § 102 with respect to this invention unless specifically designated by Applicant as such.

CERTIFICATE OF MAILING

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the U.S. Postal Service, first class mail, addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below

5/30/13
Date of Deposit
OMM_US:71580147.1

Saundra R Carr
Saundra Carr

INFORMATION DISCLOSURE STATEMENT FILING PROVISION:

☐ This IDS is believed to be timely in that it is being submitted under 37 CFR § 1.97(b), that is (1) within three months of the filing date of the application, which is not a continued prosecution application filed under § 1.53(d); or (2) within three months of entry of the national stage as set forth in 37 CFR § 1.491; or (3) before the mailing of a first Office action on the merits; or (4) before the mailing of a first Office action after filing a request for continued examination under § 1.114. Thus, no fee is required.

☐ However, if the undersigned is in error in this regard, Applicant respectfully requests that the Office consider this IDS as filed under 37 CFR § 1.97(c), if applicable, and charge the fee due under 37 CFR § 1.17(p) to the deposit account referenced below.

☐ However, if the undersigned is in error in this regard, Applicant respectfully requests that the Office consider this IDS as filed under 37 CFR § 1.97(c), if applicable, and a statement under 37 CFR § 1.97(e) is included below, thus no fee is required.

☒ This IDS is being submitted under 37 CFR § 1.97(c), that is after mailing of a first Office action on the merits, but before a Final Action under 37 CFR § 1.113 or a Notice of Allowance under 37 CFR § 1.311.

☐ The fee due under 37 CFR § 1.17(p) is submitted herewith.

☐ A statement under 37 CFR § 1.97(e) is included below, thus no fee is required. In the event that this IDS is not received before a Final Action or a Notice of Allowance, then Applicant respectfully requests that the Office consider the filing of these papers to be submitted under 37 CFR § 1.97(d) and charge the fee due under 37 CFR § 1.17(p) to the deposit account below.

☐ This IDS is being submitted under 37 CFR § 1.97(d), that is after a Final Action under 37 CFR § 1.113 or a Notice of Allowance under 37 CFR § 1.311, but before payment of the issue fee. A statement under 37 CFR § 1.97(e) is included below. The fee due under 37 CFR § 1.17(p) is submitted herewith.

Statement Under 37 CFR § 1.97(e):

☐ Each item contained in this IDS was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS.

☐ No item contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this statement after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 CFR § 1.56(c) more than three months prior to the filing of this IDS.

PAYMENT AND/OR AUTHORIZATION TO CHARGE FEES:

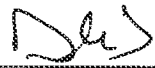
- ☐ A check in the amount of \$180.00 is enclosed for the above fee(s).
☒ Please charge \$180.00 to Deposit Account No. 50-2862 for the above fee(s).

The Commissioner is authorized to charge any fees required by the filing of these papers, and to credit any overpayment to O'Melveny & Myers' Deposit Account No. 50-2862.

Respectfully submitted,

O'MELVENY & MYERS LLP

Dated: Mar 30, 2013

By: 
David B. Murphy
Reg. No. 31,125
Attorneys for Applicant

DBM/sc

34263

PATENT TRADEMARK OFFICE

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 12/886,429	Filing Date 09/20/2010	☐ To be Mailed
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ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

(Column 1)

(Column 2)

FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)
☒ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	165
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X \$ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	165

APPLICATION AS AMENDED – PART II

(Column 1)

(Column 2)

(Column 3)

AMENDMENT	05/30/2013	CLAIMS REMAINING AFTER AMENDMENT	MINUS	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	* 117	Minus	** 78	= 39	x \$40 =	1560
	Independent (37 CFR 1.16(h))	* 5	Minus	***5	= 0	x \$210 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	1560

(Column 1)

(Column 2)

(Column 3)

AMENDMENT	CLAIMS REMAINING AFTER AMENDMENT	MINUS	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X \$ =
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X \$ =
	☐ Application Size Fee (37 CFR 1.16(s))					
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					
						TOTAL ADD'L FEE

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
/GWENDOLYN MYERS/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Document code: WFEE

United States Patent and Trademark Office
Sales Receipt for Accounting Date: 06/03/2013

GMYERS	SALE	#00000001	Mailroom Dt:	05/30/2013	502862	12886429
		01	FC : 2202		1,560.00	DA

**TERMINAL DISCLAIMER TO OBTAIN A DOUBLE PATENTING
REJECTION OVER A "PRIOR" PATENT**

Docket Number (Optional)
443,773-051

In re Application of: RANDALL M. KATZ et al.

Application No.: 12/886,429

Filed: September 20, 2010

For: APPARATUS, SYSTEMS AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN
ELECTRONIC ENVIRONMENT

The owner*, MILESTONE ENTERTAINMENT LLC, of 100 percent interest in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of **prior patent** No. 8,241,110 as the term of said **prior patent** is presently shortened by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the **prior patent** are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the owner does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term of the **prior patent**, "as the term of said **prior patent** is presently shortened by any terminal disclaimer," in the event that said **prior patent** later:

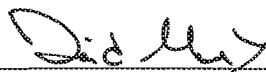
- expires for failure to pay a maintenance fee;
- is held unenforceable;
- is found invalid by a court of competent jurisdiction;
- is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321;
- has all claims canceled by a reexamination certificate;
- is reissued; or
- is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

Check either box 1 or 2 below, if appropriate.

1. ☐ For submissions on behalf of a business/organization (e.g., corporation, partnership, university, government agency, etc.), the undersigned is empowered to act on behalf of the business/organization.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

2. ☒ The undersigned is an attorney or agent of record. Reg. No. 31,125


Signature

5/29/13
Date

DAVID B. MURPHY
Typed or printed name

949-760-9600
Telephone Number

- ☒ Terminal disclaimer fee under 37 CFR 1.20(d) included.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner).
Form PTO/SB/96 may be used for making this certification. See MPEP § 324.

This collection of information is required by 37 CFR 1.321. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING
REJECTION OVER A "PRIOR" PATENT**

Docket Number (Optional)
443,773-051

In re Application of: RANDALL M. KATZ et al.

Application No.: 12/886,429

Filed: September 20, 2010

For: APPARATUS, SYSTEMS AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN
ELECTRONIC ENVIRONMENT

The owner*, MILESTONE ENTERTAINMENT LLC, of 100 percent interest in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of **prior patent** No. 7,798,696 as the term of said **prior patent** is presently shortened by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the **prior patent** are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the owner does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term of the **prior patent**, "as the term of said **prior patent** is presently shortened by any terminal disclaimer," in the event that said **prior patent** later:

- expires for failure to pay a maintenance fee;
- is held unenforceable;
- is found invalid by a court of competent jurisdiction;
- is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321;
- has all claims canceled by a reexamination certificate;
- is reissued; or
- is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

Check either box 1 or 2 below, if appropriate.

1. ☐ For submissions on behalf of a business/organization (e.g., corporation, partnership, university, government agency, etc.), the undersigned is empowered to act on behalf of the business/organization.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

2. ☒ The undersigned is an attorney or agent of record. Reg. No. 31,125

David B. Murphy
Signature

5/29/13
Date

DAVID B. MURPHY
Typed or printed name

949-760-9600
Telephone Number

- ☒ Terminal disclaimer fee under 37 CFR 1.20(d) included.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner).
Form PTO/SB/96 may be used for making this certification. See MPEP § 324.

This collection of information is required by 37 CFR 1.321. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Patent Application Fee Transmittal

Application Number:	12886429			
Filing Date:	20-Sep-2010			
Title of Invention:	APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT			
First Named Inventor/Applicant Name:	Randall M. Katz			
Filer:	David B. Murphy/Saundra Carr			
Attorney Docket Number:	443,773-051 (240D1)			
Filed as Small Entity				
Utility under 35 USC 111(a) Filing Fees				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Basic Filing:				
Basic Filing:				
Claims in excess of 20	2202	39	2202	1560
Miscellaneous-Filing:				
Basic Filing:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension - 3 months with \$0 paid	2253	1	700	700
Miscellaneous:				
Statutory or Terminal Disclaimer	1814	1	700	700
Total in USD (\$)				2580

Electronic Acknowledgement Receipt

EFS ID:	15899911
Application Number:	12886429
International Application Number:	
Confirmation Number:	1557
Title of Invention:	APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT
First Named Inventor/Applicant Name:	Randall M. Katz
Customer Number:	1557
Filer:	David B. Murphy/Saundra Carr
Filer Authorized By:	David B. Murphy
Attorney Docket Number:	443,773-051 (240D1)
Receipt Date:	29-MAY-2013
Filing Date:	20-SEP-2010
Time Stamp:	12 88 6429
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$2580
RAM confirmation Number	yes
Deposit Account	502862
Authorized User	yes
<p>The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:</p> <p>Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)</p> <p>Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)</p>	

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	-51TRANS.pdf	86932	no	2
			4cb1aa380f59afeb1bedcc392f9eb35a053c470e		
Warnings:					
Information:					
2	Amendment/Req. Reconsideration-After Non-Final Reject	-51amd.pdf	42311	no	1
			6195a8257a9cf7c085654d804c9832b7519eb03e		
Warnings:					
Information:					
3	Claims	-51CLAIMS.pdf	563712	no	15
			f88689fde496638444fbaa76e797013962634934		
Warnings:					
Information:					
4	Applicant Arguments/Remarks Made in an Amendment	-51REMARKS.pdf	70885	no	2
			4b19dcc2385a1b012643fb25f11228a4b8a805a		
Warnings:					
Information:					
5	Terminal Disclaimer Filed	-51TD110.pdf	87115	no	1
			354876be6b99cd237c3ef659496b2cca58db0c4d		
Warnings:					
Information:					
5	Terminal Disclaimer Filed	-51TD110.pdf	87115	no	1
			354876be6b99cd237c3ef659496b2cca58db0c4d		
Warnings:					
Information:					
7	Fee Worksheet (SB06)	fee-info.pdf	34366	no	2
			c543705caaa8463fe5c5d5c51bd3534c1c5e9b27		
Warnings:					
Information:					
Total Files Size (in bytes):			971809		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application Of:)
RANDALL M. KATZ et al.) Group Art Unit: 3714
Serial No.: 12/886,429) Examiner: COBURN, Corbett
Filed: September 20, 2010) Confirmation No. 1557
For: APPARATUS, SYSTEMS AND METHODS)
FOR IMPLEMENTING ENHANCED GAMING)
AND PRIZING PARAMETERS IN AN)
ELECTRONIC ENVIRONMENT)

AMENDMENT TRANSMITTAL

Via EFS-Web Transmission

Mail Stop: AMD

Commissioner for Patents
Alexandria, Virginia 22313-1450

Sir:

In response to the Office Action mailed November 30, 2012, transmitted herewith for filing in the above-identified application are:

- 1) Amendment and Response (18 pages)
- 2) Terminal Disclaimer for USP 8,241,110 (1 page)
- 3) Terminal Disclaimer for USP 7,798,896 (1 page)

PETITION FOR EXTENSION OF TIME:

- ☒ Applicant(s) petitions for an extension of time under 37 CFR § 1.136 [fees: 37 CFR § 1.17(a)(1)-(3)] as indicated below:

- ☒ Applicant(s) claims Small entity Status.

EXTENSION (months)	FEE FOR SMALL ENTITY	FEE FOR OTHER THAN SMALL ENTITY
1 month	☐ \$100	☐ \$200
2 months	☐ \$300	☐ \$600
3 months	☒ \$700	☐ \$1,400

- ☒ If an additional extension of time is required, please consider this a petition therefor.

CERTIFICATE OF MAILING (37 C.F.R. §1.8a)

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being electronically transmitted to the Mail Stop: AMD; Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below via the USPTO EFS-Web filing system.

May 29, 2013
Date of Deposition
OMM_US:71581754.1

Sandra L. Carr
Sandra L. Carr

The fees for claims (37 CFR § 1.16(b)-(d)) have been calculated as shown below:

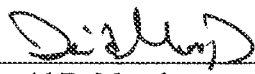
Total Claims	117	-	78	=	39	X	\$ 80	3120
Independent Claims	5	-	5	=	0	X	\$420	0
Multiple Dependent Claims	\$450	(if applicable)					☐	0
Terminal Disclaimer Fee \$160 - Large Entity (2 patents)								320
							TOTAL	3440
Reduction by ½ for claiming Small Entity Status.							☒	1720
TOTAL CLAIM FEES								1720
TOTAL EXTENSION FEES								700
TOTAL CLAIM / FILING FEES								\$2420

- ☒ Please charge O'Melveny & Myers' Deposit Account No. **50-2862** in the amount of **\$2420**.
- ☒ The Commissioner is authorized to charge O'Melveny & Myers' Deposit Account No. **50-2862** for any fees required under 37 CFR §§ 1.16 and 1.17 that are not covered, in whole or in part, by a check enclosed herewith and to credit any overpayments to said Deposit Account **50-2862**.

Respectfully submitted,

O'MELVENY & MYERS LLP

Dated: May 29, 2013

By: 
David B. Murphy
Reg. No. 31,125

/slc

34263
PATENT TRADEMARK OFFICE

O'Melveny & Myers LLP
610 Newport Center Drive
17th Floor
Newport Beach, CA 92660
(949) 760-9600

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

RANDALL M. KATZ et al.

Serial No.: 12/886,429

Filed: September 20, 2010

For: APPARATUS, SYSTEMS AND
METHODS FOR IMPLEMENTING
ENHANCED GAMING AND PRIZING
PARAMETERS IN AN ELECTRONIC
ENVIRONMENT

Group Art Unit: 3714

Examiner: COBURN, Corbett

Confirmation No. 1557

AMENDMENT AND RESPONSE TO OFFICE ACTION

Mail Stop: AMD
Commissioner for Patents

Sir:

In response to the Office Action mailed November 30, 2012, Applicants make the following amendments:

Amendments to the Claims begin on page 3 of this paper.

Remarks begin on page 17 of this paper.

CERTIFICATE OF TRANSMITTAL

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being transmitted to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below via the USPTO EFS-Web filing system.

May 29, 2013
Date of Deposit
OMM_US:71199716.2

Saundra L. Carr
Saundra L. Carr

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims

1. (Withdrawn) A method for multi-level electronic entertainment comprising the steps of:

interactively displaying a first phase of user experience, followed by a second phase of user experience for revealing prize information wherein the displayed prize information is determined at least in part by predefined imposed prizing parameters.

2. (Withdrawn) The method of claim 1 wherein the predefined imposed prizing parameters are legislated parameters.

3. (Withdrawn) The method of claim 2 wherein the predefined imposed prizing parameters are GLEPS parameters.

4. (Withdrawn) The method of claim 3 wherein the GLEPS parameters include a 1:x prizing provision.

5. (Withdrawn) The method of claim 3 wherein the GLEPS parameters includes a predetermined percentage payout.

6. (Withdrawn) The method of claim 5 wherein the predetermined percentage payout is 50% or greater.

7. (Original) The method of claim 5 wherein the predetermined percentage payout is 75% or greater.

8. (Withdrawn) The method of claim 1 wherein the user experience is predetermined.

9. (Withdrawn) The method of claim 1 wherein the user experience is a lottery game.
10. (Previously Amended) A method for electronic interaction with users of the system through a series of interactions, comprising the steps of:
receiving mandated parameters, the mandated parameters being those which must be achieved by the system as a whole,
storing in a memory coupled to the input at least the mandated parameters,
processing in a processing system coupled to the memory for implementing the mandated parameters by utilizing variable parameters, the processing system utilizing the variable parameters to achieve the mandated parameters,
storing information regarding particular game play events as determined by the processor,
generating presentations for at least displaying game play events,
performing game analytics on the game play events, and
varying the displays presented to the user to achieve the mandated parameters.
11. (Previously Amended) The method for electronic interaction with users of the system of claim 10 wherein the users interaction with the system is predefined.
12. (Previously Amended) The method for electronic interaction with users of the system of claim 10 wherein the users interaction with the system at least in part determines the outcome of an individual game.
13. (Withdrawn) A method for enhancing user interest in electronic entertainment including prizes, comprising the steps of:
defining a first game having first prizing rules,
offering the first game for play,
monitoring the amount of player participation, and

utilizing the player participation information to define second prizing rules for a second game.

14. (Withdrawn) A method for providing multilevel prizing in a game of chance, comprising the steps of:

receiving a first wager and engaging in initial game play,

if the play results in a win, presenting the player with the option of playing a first prizing mechanism, or of playing further for entry into a higher prizing mechanism, and

if the player elects to play further, permitting game play to proceed, and if the player elects to proceed with the first prizing mechanism, awarding the prize, if any.

15. (Withdrawn) The method for providing multilevel prizing in a game of chance of claim 14, further including the step of receiving an additional wager prior to permitting further play.

16. (Withdrawn) The method for providing multilevel prizing in a game of chance of claim 15, wherein the additional wager is deducted from prior winnings.

17. (Previously Presented) The method for electronic interaction with users of the system of claim 10 wherein the mandated parameters are selected from the group consisting of: prize pay out and win rates.

18. (Previously Presented) The method for electronic interaction with users of the system of claim 10 wherein the variable parameters are selected from the group consisting of: game selection and game structure.

19. (Previously Presented) The method for electronic interaction with users of the system of claim 18 wherein the game structure parameter involves decision points.

20. (Previously Presented) The method for electronic interaction with users of the system of claim 18 wherein the game structure parameter involves numbers of levels of game play.

21. (Previously Presented) The method for electronic interaction with users of the system of claim 18 wherein the game structure parameter involves duration of game play.

22. (Previously Presented) The method for electronic interaction with users of the system of claim 10 wherein the game play events utilizes real world probabilities, and a lower prizing payout is implemented to achieve the mandated payout parameters.

23. (Previously Presented) The method for electronic interaction with users of the system of claim 10 wherein the electronic system involves a lottery.

24. (Currently Amended) The method for electronic interaction with users of the system of claim 10 wherein one or more buddy lists enable games between multiple users ~~players~~.

25. (Currently Amended) The method for electronic interaction with users of the system of claim 10 wherein one or more association groupings enable games between multiple users ~~players~~.

26. (Previously Presented) The method for electronic interaction with users of the system of claim 25 wherein the association groupings are competitive game play pairings.

27. (Previously Presented) The method for electronic interaction with users of the system of claim 10 further including a ticket for accessing the electronic environment.

28. (Previously Presented) The method for electronic interaction with users of the system of claim 27 wherein the ticket is a lottery ticket.

29. (Previously Presented) The method for electronic interaction with users of the system of claim 28 wherein lottery ticket includes variable information regarding the electronic environment.

30. (Previously Presented) The method for electronic interaction with users of the system of claim 28 wherein the lottery ticket includes a scratch-off lottery ticket.

31. (Currently Amended) The method for electronic interaction with users of the system of claim 10 further including user ~~player~~ registration.

32. (Currently Amended) The method for electronic interaction with users of the system of claim 31 wherein the user ~~player~~ registration is an on line registration system.

33. (Previously Presented) The method for electronic interaction with users of the system of claim 10 further including a leader board.

34. (Previously Presented) The method for electronic interaction with users of the system of claim 10 wherein display of game play includes a portion of the display with a first display image chosen by the user followed by a second display image in the same portion of the display.

35. (Currently Amended) The method for electronic interaction with users of the system of claim 10 wherein game play analytics ~~analysis~~ tracks user specific play.

36. (Currently Amended) The method for electronic interaction with users of the system of claim 10 wherein the game play analytics ~~analysis-system~~ includes a decision engine to optimize the prizing structure.

37. (Currently Amended) The method for electronic interaction with users of the system of claim 10 wherein the game play analytics ~~analysis-system~~ includes a decision engine to maximize game play.

38. (Previously Presented) The method for electronic interaction with users of the system of claim 10 wherein the prize is a non-cash prize.

39. (Previously Presented) The method for electronic interaction with users of the system of claim 38 wherein the non-cash prize is points.

40. (Previously Presented) The method for electronic interaction with users of the system of claim 38 wherein the non-cash prize is an image.

41. (Previously Presented) The method for electronic interaction with users of the system of claim 38 wherein the non-cash prize is free play.

42. (Previously Presented) The method for electronic interaction with users of the system of claim 38 wherein the non-cash prize is advancing to other levels.

43. (Previously Presented) A method for effecting game play and prizing in an electronic environment, comprising:

receiving mandated parameters,

storing in a memory at least the mandated parameters,

processing in a processing system coupled to the memory for implementing the mandated parameters by utilizing variable parameters which define a particular game play experience, characterized in that the system utilizes probabilities corresponding closely with real world probabilities while the mandated parameters constrain the game to provide prizing which could not be achieved through use of said probability,

recording information regarding particular game play events as determined by the processor,

generating a presentation for at least displaying game play events, and

performing game analytics on the game play events.

44. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the mandated parameters including at least prize payout.

45. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the mandated parameters including at least win rates.

46. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the variable parameters including at least the game structure.

47. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the variable parameters include at least game selection.

48. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the mandated parameters include a guaranteed prizing structure.

49. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 48 wherein the guaranteed prizing structure is defined as applied to a geographic region.

50. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 49 wherein game play requires purchase of a ticket and wherein the geographic region is the geographic region in which the ticket was purchased.

51. (Currently Amended) The method for effecting game play and prizing in an electronic environment of claim 49 wherein the geographic region is the geography of the user player.

52. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 48 wherein the guaranteed prizing structure is defined as applied to a collection of games.

53. (Currently Amended) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the electronic system comprises ~~comprises~~ an internet based electronic game play system.

54. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the electronic system involves a lottery.

55. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the game play has a probability outcomes substantially equal to real world outcomes.

56. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein centralized processing is performed.

57. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 43 further including auditing of the system.

58. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the prize structure parameters includes criteria for near wins.

59. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the criteria for near wins includes the number of near wins for the game.

60. (Currently Amended) The method for effecting game play and prizing in an electronic environment of claim 43 wherein one or more buddy lists enable games between multiple users ~~players~~.

61. (Currently Amended) The method for effecting game play and prizing in an electronic environment of claim 43 wherein one or more association groupings enable games between multiple users ~~players~~.

62. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 61 wherein the association groupings are competitive game play pairings.

63 (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 43 further including a ticket for accessing the electronic environment.

64. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 63 wherein the ticket is a lottery ticket.

65. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 64 wherein lottery ticket includes variable information regarding the electronic environment.

66. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 64 wherein the lottery ticket includes a scratch-off lottery ticket.

67. (Currently Amended) The method for effecting game play and prizing in an electronic environment of claim 43 further including user ~~player~~ registration.

68. (Currently Amended) The method for effecting game play and prizing in an electronic environment of claim 67 wherein the user ~~player~~ registration is an on line registration system.

69. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 43 further includes a leader board.

70. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein display of game play includes a portion of the display with a first display image chosen by the user followed by a second display image in the same portion of the display.

71. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein game play analysis tracks user specific play.

72. (Currently Amended) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the game analytics ~~play-analysis-system~~ includes a decision engine to optimize the prizing structure.

73. (Currently Amended) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the game analytics ~~play-analysis-system~~ includes a decision engine to maximize game play.

74. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the prize is a non-cash prize.

75. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 74 wherein the non-cash prize is points.

76. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 74 wherein the non-cash prize is an image.

77. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 74 wherein the non-cash prize is free play.

78. (Previously Presented) The method for effecting game play and prizing in an electronic environment of claim 74 wherein the non-cash prize is advancing to other levels.

79. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein the mandated parameters include a guaranteed prizing structure.

80. (Newly Presented) The method for electronic interaction with users of the system of claim 79 wherein the guaranteed prizing structure is defined as applied to a geographic region.

81. (Newly Presented) The method for electronic interaction with users of the system of claim 80 wherein game play requires purchase of a ticket and wherein the geographic region is the geographic region in which the ticket was purchased.

82. (Newly Presented) The method for electronic interaction with users of the system of claim 80 wherein the geographic region is the geography of the user.

83. (Newly Presented) The method for electronic interaction with users of the system of claim 80 wherein the guaranteed prizing structure is defined as applied to a collection of games.

84. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein the electronic system comprises an internet based electronic game play system.

85. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein the electronic system involves a lottery.

86. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein the game play has a probability outcomes substantially equal to real world outcomes.

87. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein centralized processing is performed.

88. (Newly Presented) The method for electronic interaction with users of the system of claim 10 further including auditing of the system.

89. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein the prize structure parameters includes criteria for near wins.

90. (Newly Presented) The method for electronic interaction with users of the system of claim 10 further including the step of verifying age qualified users.

91. (Newly Presented) The method for electronic interaction with users of the system of claim 10 further including the step of limiting use to geographic presence of users within a given area.

92. (Newly Presented) The method for electronic interaction with users of the system of claim 10 further including the step of downloading entertainment to a digital device.

93. (Newly Presented) The method for electronic interaction with users of the system of claim 10 further including the step of providing an applet for a remote communications device.

94. (Newly Presented) The method for electronic interaction with users of the system of claim 93 wherein the communications device is a wireless communications device.

95. (Newly Presented) The method for electronic interaction with users of the system of claim 93 wherein the communications device includes graphical display capability.

96. (Newly Presented) The method for electronic interaction with users of the system of claim 95 device is a wireless communications device with graphical display capability.

97. (Newly Presented) The method for electronic interaction with users of the system of claim 10 further including the step of downloading entertainment to an interactive television.

98. (Newly Presented) The method for electronic interaction with users of the system of claim 10 further including the step of providing different levels of image resolution.

99. (Newly Presented) The method for electronic interaction with users of the system of claim 10 further including the step of providing a user's club.

100. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein the user's club is a frequent user's club.

101. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein the user's club provides points to the user.

102. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein the points are redeemed at an authorized location.

103. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein the analytics track user specific actions.

104. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 further including the step of verifying age qualified users.

105. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 further including the step of limiting use to geographic presence of users within a given area.

106. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 further including the step of downloading entertainment to a digital device.

107. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 further including the step of providing an applet for a remote communications device.

108. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 107 wherein the communications device is a wireless communications device.

109. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 107 wherein the communications device includes graphical display capability.

110. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 109 wherein the device is a wireless communications device with graphical display capability.

111. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 further including the step of downloading entertainment to an interactive television.

112. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 further including the step of providing different levels of image resolution.

113. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 further including the step of providing a user's club.

114. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the user's club is a frequent user's club.

115. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the user's club provides points to the user.

116. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the points are redeemed at an authorized location.

117. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the analytics track user specific actions.

REMARKS

Applicant responds to the Office Action mailed November 30, 2013. Claims 1-115 are pending and Claims 1-9 and 13-16 have been withdrawn.

The claims have been reviewed to ensure consistency of language.

Dependent claims 24, 25, 31, 32, 51, 60, 61, 67 and 68 change “players” to “users” to be consistent with the independent claims.

Dependent claims 35, 36, 37, 72 and 73 change “analysis system” to “analytics” to be consistent with the independent claims.

Dependent claim 53 deletes a redundant “comprises”.

Newly presented dependent claims 79-89 were previously presented as depending from independent claim 43 (and still are). Dependent claims 79-89 recite the same limitation, but depend from independent claim 10.

Newly presented dependent claims 90-117 are supported by at least the following paragraphs of the specification:

Claims	Example Support
90, 104	[0054], [0148]
91, 105	[0163]
92, 106	[0155]
93, 107	[0180]
94, 108	[0138]
95, 109	[0155]
96, 110	[0052], [0138], [0155]
97, 111	[0147], [0150], [0155]
98, 112	[0177]
99, 113	[0037], [0156]

100, 114	[0037], [0173]
101, 115	[0037], [0173]
102, 116	[0175]
103, 117	[0203]

The requested Terminal Disclaimers are being filed on even date herewith.

CONCLUSION

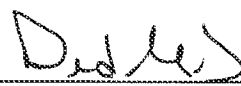
Applicant hereby request and petitions for a three month extension of time. The requisite fee is being paid electronically with this Amendment and Response. However, the Commissioner is hereby authorized to charge any additional fees that may be required to Deposit Account No. 50-2862.

Favorable action on the merits of the claims is therefore earnestly solicited. If any issues remain, please contact Applicant's undersigned representative at (949) 760-9600.

Respectfully submitted,

O'MELVENY & MYERS LLP

Dated: 5/29/13

By: 
David B. Murphy
Reg. No. 31,125

DBM/slc

34263
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STATEMENT UNDER 37 CFR 3.73(b)Applicant/Patent Owner: Randall M. Katz

(o/r 443,773-051)

Application No./Patent No.: 12/886,429Filed/Issue Date: September 20, 2010Titled: APPARATUS, SYSTEMS AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING
PARAMETERS IN AN ELECTRONIC ENVIRONMENT

MILESTONE ENTERTAINMENT LLC

, a corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest in;
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(The extent (by percentage) of its ownership interest is _____ %); or
3. ☐ the assignee of an undivided interest in the entirety of (a complete assignment from one of the joint inventors was made)
- the patent application/patent identified above, by virtue of either:

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OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

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☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

- ☐ As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

RMK
Signature

7/12/11
Date

RANDALL M. KATZ

President

Printed or Typed Name

Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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RECORDATION DATE: 09/20/2010

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NUMBER OF PAGES: 6

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).
DOCKET NUMBER: 443,773-051 (240D1)

ASSIGNOR:

KATZ, RANDALL M.

DOC DATE: 08/09/2004

ASSIGNOR:

DAWSON, GARY

DOC DATE: 08/09/2004

ASSIGNEE:

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SERIAL NUMBER: 12886429

FILING DATE:

PATENT NUMBER:

ISSUE DATE:

TITLE: APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING
AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT

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501296383

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Randall M. Katz</td><td>08/09/2004</td></tr><tr><td>Gary Dawson</td><td>08/09/2004</td></tr></tbody></table>		Name	Execution Date	Randall M. Katz	08/09/2004	Gary Dawson	08/09/2004				
Name	Execution Date										
Randall M. Katz	08/09/2004										
Gary Dawson	08/09/2004										
RECEIVING PARTY DATA											
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Name:	Milestone Entertainment LLC										
Street Address:	1012 N. Roxbury Drive										
City:	Beverly Hills										
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Postal Code:	90210										
PROPERTY NUMBERS Total: 1											
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Property Type	Number										
Application Number:	12988429										
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NAME OF SUBMITTER:	David B. Murphy										
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Electronic Acknowledgement Receipt

EFS ID:	15878568
Application Number:	12886429
International Application Number:	
Confirmation Number:	1557
Title of Invention:	APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT
First Named Inventor/Applicant Name:	Randall M. Katz
Customer Number:	1557
Filer:	David B. Murphy/Saundra Carr
Filer Authorized By:	David B. Murphy
Attorney Docket Number:	443,773-051 (240D1)
Receipt Date:	28-MAY-2013
Filing Date:	20-SEP-2010
Time Stamp:	12 886429
Application Type:	Utility under 35 USC 111(a)

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1	Assignee showing of ownership per 37 CFR 3.73.	statement.pdf	257911 17d19eb5595b0f7ab3d1a1e1b4221ecd50bb59	no	5

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If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/886,429	09/20/2010	Randall M. Katz	443,773-051 (240D1)	1557
34263	7590	11/30/2012		
O'Melveny & Myers LLP IP&T Calendar Department LA-13-A7 400 South Hope Street Los Angeles, CA 90071-2899			EXAMINER COBURN, CORBETT B	
			ART UNIT 3714	PAPER NUMBER
			NOTIFICATION DATE 11/30/2012	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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cpacheco@omm.com
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Office Action Summary	Application No. 12/886,429	Applicant(s) KATZ ET AL.	
	Examiner CORBETT B. COBURN	Art Unit 3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2012.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-78 is/are pending in the application.
- 5a) Of the above claim(s) 1-9 and 13-16 is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 10-12 and 17-78 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 20 September 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) ☐ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application |
| 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/23/10</u> . | 6) ☐ Other: ____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 10-12 in the reply filed on 22 October 2012 is acknowledged.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned

Art Unit: 3714

with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 10-12 & 17-78 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over at least claims 30-55 of U.S. Patent No. 8,241,110. Although the conflicting claims are not identical, they are not patentably distinct from each other because the apparatus of the patent renders the claimed method obvious.

4. Claim 43 & 48-59 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 11-13, 19, 25, 26, 31, 37, 39 40 & 41 of U.S. Patent No. 7,798,896. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent's system renders the claimed method obvious.

Examiner's Note

5. If Applicant would use the new automated method of filing any Terminal Disclaimers, it would be greatly appreciated. This method leads to much faster procession of Terminal Disclaimers.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CORBETT B. COBURN whose telephone number is (571)272-4447. The examiner can normally be reached on 8-5:30.

Art Unit: 3714

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Lewis can be reached on (571) 272-7673. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CORBETT B COBURN/
Primary Examiner
Art Unit 3714

AMENDMENTS TO THE SPECIFICATION:

Please replace amended paragraphs [0001] and [0002] as follows:

[0001] This application is a division of Application No. 10/654,585, filed September 2, 2003, now U.S. Patent 7,798,896, which is incorporated herein by reference as if fully set forth herein, ~~which is a continuation in part of Application No. 10/123,861, filed April 15, 2002, now published as US-2003-0060261-A1, which is a continuation in part of Application No. 09/965,620, filed September 26, 2001, now U.S. Patent 6,811,484, which is a continuation in part of Application No. 09/672,179, filed September 27, 2000, now U.S. Patent No. 6,488,280, all of which are incorporated herein by reference as if full set forth herein.~~

[0002] Additionally, this application is related to ~~applications~~ Application No. 10/123,861, filed April 15, 2002, now published as US-2003-0060261-A1, Application No. 09/965,620, filed September 26, 2001, now U.S. Patent 6,811,484, Application No. 09/672,179, filed September 27, 2000, now U.S. Patent No. 6,488,280, and Serial Application No. 09/585,987, filed June 2, 2000, now U.S. Patent No. 6,565,084, which is are incorporated herein by reference as if full set forth herein.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	((("8241110") or ("7798896"))).PN.	USPAT; USOCR	OR	OFF	2012/11/27 15:21
S1	114	("20030060261" "20030060276" "20030189288" "20050096117" "20060287051" "20070129144" "20080220840" "20090011812" "20090221342" "20100041458" "3873092" "4348027" "4582324" "4772025" "4836546" "4856787" "4883278" "5035422" "5074566" "5112050" "5116049" "5157602" "5158293" "5269521" "5271626" "5317135" "5407199" "5409234" "5417424" "5472196" "5475205" "5513852" "5518253" "5569082" "5569512" "5620182" "5628684" "5643088" "5651735" "5655961" "5685541" "5697844" "5709603" "5721583" "5772510" "5772511" "5779549" "5785315" "5791990" "5813913" "5816575" "5816918" "5842921" "5855514" "5857175" "5871398" "5909875" "5931467" "5935001" "5936661" "5949042" "6024641" "6048268" "6070872" "6086477" "6102395" "6102400" "6193610" "6203011" "6234896" "6238288" "6241246" "6241606" "6250685" "6251017" "6267376" "6273817" "6273820" "6277026" "6290600" "6309298" "6312334" "6322446" "6354593" "6382627" "6435500" "6443452" "6475085" "6488280" "6491215" "6497408" "6514144" "6547242" "6565084" "6607439" "6663105" "6749198" "6749500" "6811484" "6824469" "6908382" "6994625" "7008317" "7052010" "7163459" "7309280" "7422213" "7749066" "7753789" "7798896" "D387390" "D420057" "D444507" "RE37371").PN.	US- PGPUB; USPAT	OR	OFF	2012/11/27 13:25

EAST Search History (Interference)

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<i>Search Notes</i> 	Application/Control No. 12886429	Applicant(s)/Patent Under Reexamination KATZ ET AL.
	Examiner CORBETT B COBURN	Art Unit 3714

SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
See attached	27 Nov 12	CBC

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

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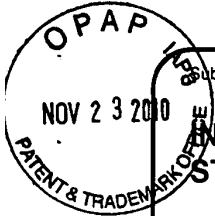
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PTO/SB/08A (08-00)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 4

Complete if Known

Application Number	12/886,429
Filing Date	September 20, 2010
First Named Inventor	Randall M. Katz et al
Group Art Unit	3714
Examiner Name	Not Yet Assigned
Attorney Docket Number	443,773-51

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		US-3,873,092		Fagan	03/25/1975	
		US-4,348,027		Escamilla-Kelly	09/07/1982	
		US-4,582,324		Koza et al	04/15/1986	
		US-4,772,025		James et al	09/20/1988	
		US-4,836,546		DiRe et al	06/06/1989	
		US-4,856,787		Itkis	08/15/1989	
		US-4,883,278		Scott	11/28/1989	
		US-5,035,422		Berman	07/30/1991	
		US-5,074,566		Desbiens	12/24/1991	
		US-5,112,050		Koza et al	05/12/1992	
		US-5,116,049		Studikoff et al	05/26/1992	
		US-5,157,602		Fields et al	10/20/1992	
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		US-5,269,521		Rossides	12/14/1993	
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		US-5,407,199		Gumina	04/18/1995	
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		US-5,709,603		Kaye	01/20/1998	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 4

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Application Number	12/886,429
Filing Date	September 20, 2010
First Named Inventor	Randall M. Katz et al
Group Art Unit	3714
Examiner Name	Not Yet Assigned
Attorney Docket Number	443,773-51

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. 1	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		US-5,931,467		Kamille	08/03/1999	
		US-5,935,001		Baba	08/10/1999	
		US-5,936,661		Trew	08/10/1999	
		US-5,949,042		Dietz II et al	09/07/1999	
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		US-6,048,268		Humble	04/11/2000	
		US-6,070,872		Squitieri	06/06/2000	
		US-6,086,477		Walker et al	07/11/2000	
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		US-6,102,400		Scott et al	08/15/2000	
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		US-6,994,625	B2	Falciglia, Sr.	02/07/2006	

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Group Art Unit	3714
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Attorney Docket Number	443,773-51

Sheet	3	of	4
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		Number	Kind Code ² (if known)			
		US-7,052,010	B2	Katz et al	05/30/2006	
		US-7,008,317	B2	Cote et al	03/07/2006	
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		US-7,753,789	B2	Walker et al	07/13/2010	
		US-7,798,896	B2	Katz et al	09-21-2010	
		US-2003/0189288	A1	Katz et al	10/09/2003	
		US-2003/0060261	A1	Katz et al	03/27/2003	
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		US-2005/0096117	A1	Katz et al	05/05/2005	
		US-2006/0287051	A1	Katz et al	12/21/2006	
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		US-2009/0011812	A1	Katz et al	01/08/2009	
		US-2009/0221342	A1	Katz et al.	09/03/2009	
		US-2010/0041458	A1	Katz et al	02/18/2010	

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		Group Art Unit	3714		
		Examiner Name	Not Yet Assigned		
Sheet	4	of	4	Attorney Docket Number	443,773-51

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
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		Finders Keepers, 1996 (retrieved from www.stewarttelevision.com on 02/25/04)	
		Top That II, 1996 (retrieved from www.stewarttelevision.com on 02/25/04)	
		\$10,000 Championship, one version for \$50,000 broadcast in 1996 (retrieved from www.stewarttelevision.com on 02/25/04)	
		SCHWARTZ, et al. "The Encyclopedia of TV Game Shows, 3 rd Edition, pp.22, 23, 48-49, 90, 98-99, 176-180	
		www.geocities.com/TelevisionCity/1856/rules.htm , CARD SHARKS, April 24, 1978, 1-3.	
		Answer to First Amended Complaint, filed June 12, 2007, in Sande Stewart Television, Inc. v. Milestone Entertainment, LLC, Civil Action No. CV-07-2606 GHK(CWx)	
		First Amended Complaint for Declaratory Judgment, filed May 22, 2007, in Sande Stewart Television, Inc. v. Milestone Entertainment, LLC, Civil Action No. CV-07-2606 GHK(CWx)	
		Stipulation for Dismissal Without Prejudice Pursuant to FRCP 41(a) in Sande Stewart Television, Inc. v. Milestone Entertainment, LLC, Civil Action No. CV-07-2606 GHK(CWx)	
Examiner Signature	/Corbett Coburn/		Date Considered
			11/27/2012

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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
12/886,429	09/20/2010	3714	2495	443,773-051 (240D1)	16	4

CONFIRMATION NO. 1557

CORRECTED FILING RECEIPT



34263
O'Melveny & Myers LLP
IP&T Calendar Department LA-13-A7
400 South Hope Street
Los Angeles, CA 90071-2899

Date Mailed: 11/30/2012

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Inventor(s)

Randall M. Katz, Beverly Hills, CA;
Gary Dawson, West Lake Village, CA;

Applicant(s)

Randall M. Katz, Beverly Hills, CA;
Gary Dawson, West Lake Village, CA;

Power of Attorney: None

Domestic Priority data as claimed by applicant

This application is a DIV of 10/654,585 09/02/2003 PAT 7798896

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.) - None.

Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

If Required, Foreign Filing License Granted: 10/05/2010

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 12/886,429**

Projected Publication Date: Not Applicable

Non-Publication Request: No

Early Publication Request: No

**** SMALL ENTITY ****

Title

APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT

Preliminary Class

463

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

RANDALL M. KATZ et al.

Serial No.: 12/886,429

Filed: September 20, 2012

For: APPARATUS, SYSTEMS AND
METHODS FOR IMPLEMENTING
ENHANCED GAMING AND
PRIZING PARAMETERS IN AN
ELECTRONIC ENVIRONMENT

Group Art Unit: 3714

Examiner: COBURN, Corbett

Confirmation No. 1557

REQUEST FOR CORRECTED FILING RECEIPT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant herein requests a Corrected Filing Receipt for the above-identified patent application. Attached as Exhibit A is a copy of the Filing Receipt with the requested corrections manually noted, namely:

The application identified under the "Domestic Priority Data" should be corrected to read as follows:

This application is a DIV of 10/654,585, 09/02/2003, now U.S. 7,798,896.

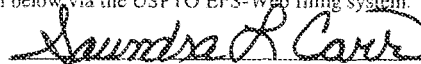
CERTIFICATE OF MAILING (37 C.F.R. §1.8)

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being electronically transmitted to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below via the USPTO EFS-Web filing system.

November 19, 2012

Date of Deposit

OMM_US:71076075.1


Saundra L. Carr

The amendment to the priority claim was requested in the Amendment and Response to Election Requirement filed October 22, 2012.

The Commissioner is hereby authorized to charge any fees that may be required in connection with the filing of these documents to Deposit Account No. 50-2862.

Respectfully submitted,

O'MELVENY & MYERS LLP

Dated: November 15, 2012

By: 
David B. Murphy
Reg. No. 31,125
Attorneys for Applicants

O'Melveny & Myers LLP
610 Newport Center Drive, 17th Floor
Newport Beach, CA 92660-6429
(949) 760-9600

EXHIBIT A



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY DOCKET NO	FOI CLAIMS	END CLAIMS
12/886,429	09/20/2010	3714	572	443,773-051 (240D1)	16	4

CONFIRMATION NO. 1557

FILING RECEIPT



0000000043871527

34263

O'Melveny & Myers LLP
IP&T Calendar Department LA-13-A7
400 South Hope Street
Los Angeles, CA 90071-2899

Date Mailed: 10/08/2010

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Applicant(s)

Randall M. Katz, Beverly Hills, CA;
Gary Dawson, West Lake Village, CA;

Power of Attorney: None

Domestic Priority data as claimed by applicant

This application is a DIV of 10/654,585 09/02/2003 PAT 7,798,896

~~which is a CIP of 10/123,861 04/15/2002~~

~~which is a CIP of 09/965,620 09/26/2001 PAT 6,811,484~~

~~which is a CIP of 09/672,179 09/27/2000 PAT 6,486,280~~

Foreign Applications

If Required, Foreign Filing License Granted: 10/05/2010

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 12/886,429**

Projected Publication Date: 01/13/2011

Non-Publication Request: No

Early Publication Request: No

**** SMALL ENTITY ****

Title

APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT

Preliminary Class

463

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

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For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

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Electronic Acknowledgement Receipt

EFS ID:	14265008
Application Number:	12886429
International Application Number:	
Confirmation Number:	1557
Title of Invention:	APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT
First Named Inventor/Applicant Name:	Randall M. Katz
Customer Number:	1557
Filer:	David B. Murphy/Saundra Carr
Filer Authorized By:	David B. Murphy
Attorney Docket Number:	443,773-051 (240D1)
Receipt Date:	19-NOV-2012
Filing Date:	11-26-2012
Time Stamp:	12886429
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
------------------------	----

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Corrected Filing Receipt	-51REQ.pdf	62890	no	2
			52de902fb4d495e44e459210e0035752242e0ee9		

Warnings:

Information:

2	Miscellaneous Incoming Letter	-51exhA.pdf	172285	no	4
			d5e2fc5586ecee16f853b5cb66010a8c1ad9d273		
Warnings:					
Information:					
Total Files Size (in bytes):				235175	
<p>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</p> <p><u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p> <p><u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p> <p><u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</p>					

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:
RANDALL M. KATZ et al.

Serial No.: 12/886,429

Filed: September 20, 2010

For: APPARATUS, SYSTEMS AND
METHODS FOR IMPLEMENTING
ENHANCED GAMING AND PRIZING
PARAMETERS IN AN ELECTRONIC
ENVIRONMENT

Group Art Unit: 3714

Examiner: COBURN, Corbett

Confirmation No. 1557

AMENDMENT AND RESPONSE TO RESTRICTION OFFICE ACTION

Mail Stop: AMD
Commissioner for Patents

Sir:

In response to the Office Action mailed September 20, 2012, Applicants make the following amendments:

Amendments to the Specification begin on page 2 of this paper.

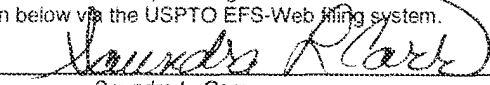
Amendments to the Claims begin on page 3 of this paper.

Remarks begin on page 14 of this paper.

CERTIFICATE OF TRANSMITTAL

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being transmitted to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below via the USPTO EFS-Web filing system.

10/22/12
Date of Deposit
OMM_US:71067711.1


Sandra L. Carr

AMENDMENTS TO THE SPECIFICATION:

Please replace amended paragraphs [0001] and [0002] as follows:

[0001] This application is a division of Application No. 10/654,585, filed September 2, 2003, now U.S. Patent 7,798,896, which is incorporated herein by reference as if fully set forth herein, ~~which is a continuation in part of Application No. 10/123,861, filed April 15, 2002, now published as US-2003-0060261-A1, which is a continuation in part of Application No. 09/965,620, filed September 26, 2001, now U.S. Patent 6,811,484, which is a continuation in part of Application No. 09/672,179, filed September 27, 2000, now U.S. Patent No. 6,488,280, all of which are incorporated herein by reference as if full set forth herein.~~

[0002] Additionally, this application is related to ~~applications~~ Application No. 10/123,861, filed April 15, 2002, now published as US-2003-0060261-A1, Application No. 09/965,620, filed September 26, 2001, now U.S. Patent 6,811,484, Application No. 09/672,179, filed September 27, 2000, now U.S. Patent No. 6,488,280, and Serial Application No. 09/585,987, filed June 2, 2000, now U.S. Patent No. 6,565,084, which is are incorporated herein by reference as if full set forth herein.

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims

1. (Withdrawn) A method for multi-level electronic entertainment comprising the steps of:

interactively displaying a first phase of user experience, followed by a second phase of user experience for revealing prize information wherein the displayed prize information is determined at least in part by predefined imposed prizing parameters.
2. (Withdrawn) The method of claim 1 wherein the predefined imposed prizing parameters are legislated parameters.
3. (Withdrawn) The method of claim 2 wherein the predefined imposed prizing parameters are GLEPS parameters.
4. (Withdrawn) The method of claim 3 wherein the GLEPS parameters include a 1:x prizing provision.
5. (Withdrawn) The method of claim 3 wherein the GLEPS parameters includes a predetermined percentage payout.
6. (Withdrawn) The method of claim 5 wherein the predetermined percentage payout is 50% or greater.
7. (original) The method of claim 5 wherein the predetermined percentage payout is 75% or greater.
8. (Withdrawn) The method of claim 1 wherein the user experience is predetermined.

9. (Withdrawn) The method of claim 1 wherein the user experience is a lottery game.
10. (Currently Amended) A method for electronic interaction with users of the system through a series of interactions, comprising the steps of:
receiving mandated parameters, the mandated parameters being those which must be achieved by the system as a whole,
storing in a memory coupled to the input at least the mandated parameters,
processing in a processing system coupled to the memory for implementing the mandated parameters by utilizing variable parameters, the processing system utilizing the variable parameters to achieve the mandated parameters,
storing information regarding particular game play events as determined by the processor,
generating presentations for at least displaying game play events,
performing game analytics on the game play events, and
~~storing user experience and prizing criteria, and~~
varying the displays presented to the user to achieve the ~~user experience criteria~~ mandated parameters.
11. (Currently Amended) The method for electronic interaction with ~~uses~~ users of the system of claim 10 wherein the users interaction with the system is predefined.
12. (Currently Amended) The method for electronic interaction with ~~uses~~ users of the system of claim 10 wherein the users interaction with the system at least in part determines the outcome of an individual game.
13. (Withdrawn) A method for enhancing user interest in electronic entertainment including prizes, comprising the steps of:
defining a first game having first prizing rules,
offering the first game for play,

monitoring the amount of player participation, and
utilizing the player participation information to define second prizing rules for a second game.

14. (Withdrawn) A method for providing multilevel prizing in a game of chance, comprising the steps of:

receiving a first wager and engaging in initial game play,
if the play results in a win, presenting the player with the option of playing a first prizing mechanism, or of playing further for entry into a higher prizing mechanism, and
if the player elects to play further, permitting game play to proceed, and if the player elects to proceed with the first prizing mechanism, awarding the prize, if any.

15. (Withdrawn) The method for providing multilevel prizing in a game of chance of claim 14, further including the step of receiving an additional wager prior to permitting further play.

16. (Withdrawn) The method for providing multilevel prizing in a game of chance of claim 15, wherein the additional wager is deducted from prior winnings.

17. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein the mandated parameters are selected from the group consisting of: prize pay out and win rates.

18. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein the variable parameters are selected from the group consisting of: game selection and game structure.

19. (Newly Presented) The method for electronic interaction with users of the system of claim 18 wherein the game structure parameter involves decision points.

20. (Newly Presented) The method for electronic interaction with users of the system of claim 18 wherein the game structure parameter involves numbers of levels of game play.

21. (Newly Presented) The method for electronic interaction with users of the system of claim 18 wherein the game structure parameter involves duration of game play.

22. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein the game play events utilizes real world probabilities, and a lower prizing payout is implemented to achieve the mandated payout parameters.

23. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein the electronic system involves a lottery.

24. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein one or more buddy lists enable games between multiple players.

25. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein one or more association groupings enable games between multiple players.

26. (Newly Presented) The method for electronic interaction with users of the system of claim 25 wherein the association groupings are competitive game play pairings.

27. (Newly Presented) The method for electronic interaction with users of the system of claim 10 further including a ticket for accessing the electronic environment.

28. (Newly Presented) The method for electronic interaction with users of the system of claim 27 wherein the ticket is a lottery ticket.

29. (Newly Presented) The method for electronic interaction with users of the system of claim 28 wherein lottery ticket includes variable information regarding the electronic environment.

30. (Newly Presented) The method for electronic interaction with users of the system of claim 28 wherein the lottery ticket includes a scratch-off lottery ticket.

31. (Newly Presented) The method for electronic interaction with users of the system of claim 10 further including player registration.

32. (Newly Presented) The method for electronic interaction with users of the system of claim 31 wherein the player registration is an on line registration system.

33. (Newly Presented) The method for electronic interaction with users of the system of claim 10 further including a leader board.

34. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein display of game play includes a portion of the display with a first display image chosen by the user followed by a second display image in the same portion of the display.

35. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein game play analysis tracks user specific play.

36. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein the game play analysis system includes a decision engine to optimize the prizing structure.

37. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein the game play analysis system includes a decision engine to maximize game play.

38. (Newly Presented) The method for electronic interaction with users of the system of claim 10 wherein the prize is a non-cash prize.

39. (Newly Presented) The method for electronic interaction with users of the system of claim 38 wherein the non-cash prize is points.

40. (Newly Presented) The method for electronic interaction with users of the system of claim 38 wherein the non-cash prize is an image.

41. (Newly Presented) The method for electronic interaction with users of the system of claim 38 wherein the non-cash prize is free play.

42. (Newly Presented) The method for electronic interaction with users of the system of claim 38 wherein the non-cash prize is advancing to other levels.

43. (Newly Presented) A method for effecting game play and prizing in an electronic environment, comprising:

receiving mandated parameters,

storing in a memory at least the mandated parameters,

processing in a processing system coupled to the memory for implementing the mandated parameters by utilizing variable parameters which define a particular game play experience, characterized in that the system utilizes probabilities corresponding closely with real world probabilities while the mandated parameters constrain the game to provide prizing which could not be achieved through use of said probability,

recording information regarding particular game play events as determined by the processor,

generating a presentation for at least displaying game play events, and

performing game analytics on the game play events.

44. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the mandated parameters including at least prize payout.

45. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the mandated parameters including at least win rates.

46. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the variable parameters including at least the game structure.

47. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the variable parameters include at least game selection.

48. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the mandated parameters include a guaranteed prizing structure.

49. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 48 wherein the guaranteed prizing structure is defined as applied to a geographic region.

50. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 49 wherein game play requires purchase of a ticket and wherein the geographic region is the geographic region in which the ticket was purchased.

51. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 49 wherein the geographic region is the geography of the player.

52. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 48 wherein the guaranteed prizing structure is defined as applied to a collection of games.

53. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the electronic system comprises comprises an internet based electronic game play system.

54. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the electronic system involves a lottery.

55. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the game play has a probability outcomes substantially equal to real world outcomes.

56. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein centralized processing is performed.

57. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 further including auditing of the system.

58. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the prize structure parameters includes criteria for near wins.

59. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the criteria for near wins includes the number of near wins for the game.

60. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein one or more buddy lists enable games between multiple players.

61. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein one or more association groupings enable games between multiple players.

62. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 61 wherein the association groupings are competitive game play pairings.

63. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 further including a ticket for accessing the electronic environment.

64. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 63 wherein the ticket is a lottery ticket.

65. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 64 wherein lottery ticket includes variable information regarding the electronic environment.

66. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 64 wherein the lottery ticket includes a scratch-off lottery ticket.

67. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 further including player registration.

68. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 67 wherein the player registration is an on line registration system.

69. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 further includes a leader board.

70. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein display of game play includes a portion of the display with a first display image chosen by the user followed by a second display image in the same portion of the display.

71. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein game play analysis tracks user specific play.

72. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the game play analysis system includes a decision engine to optimize the prizing structure.

73. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the game play analysis system includes a decision engine to maximize game play.

74. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 43 wherein the prize is a non-cash prize.

75. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 74 wherein the non-cash prize is points.

76. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 74 wherein the non-cash prize is an image.

77. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 74 wherein the non-cash prize is free play.

78. (Newly Presented) The method for effecting game play and prizing in an electronic environment of claim 74 wherein the non-cash prize is advancing to other levels.

REMARKS

Applicant responds to the restriction Office Action mailed September 20, 2012. Applicant elects to proceed without traverse to Group II. As stated in the Office Action, that is drawn to "method of electronic interaction". Accordingly, claims 1 - 9 and 13 - 16 have been withdrawn. Claims 10 - 12 have been amended, and additional claims 17 - 78 added to more completely cover Applicants inventions.

Applicant draws the Examiner's attention to related patents US Patents 8,241,110 (Examiner Deodhar) and 7,798,896 (Examiner Coburn). Independent claim 10 of the instant application is a method claim having a number of parallel limitations to apparatus claim 30 in the '110 patent. The limitation in dependent claim 47 ("game analysis system") is presented in the independent method claim 10, herein. Dependent claims 19 - 42 generally correspond to the dependent claims 31 to 55 of the '110 patent (other than for dependent claim 47). Independent method claim 43 in the instant case has a number of parallel limitations to independent claim 1 of the '896 patent. Certain of the dependent claims also correspond generally with dependent claims 48 - 59 of the instant application mapping to claims 2, 11, 12, 13, 19, 25, 26, 31, 37, 39, 40 and 41 of the '896 patent.

The effective filing date of the subject matter of the instant claims is September 2, 2003. The priority claim has been amended to claim priority to parent application Serial No. 10/654,585, now U.S. Patent 7,798,896, filed September 2, 2003.

CONCLUSION

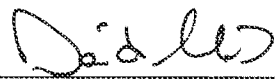
The Commissioner is hereby authorized to charge any additional fees that may be required to Deposit Account No. 50-2862.

Favorable action on the merits of the claims is therefore earnestly solicited. If any issues remain, please contact Applicant's undersigned representative at (949) 760-9600.

Respectfully submitted,

O'MELVENY & MYERS LLP

Dated: October 22, 2012

By: 
David B. Murphy
Reg. No. 31,125

DBM/slc

34263

PATENT TRADEMARK OFFICE

Electronic Patent Application Fee Transmittal				
Application Number:		12886429		
Filing Date:		20-Sep-2010		
Title of Invention:		APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT		
First Named Inventor/Applicant Name:		Randall M. Katz		
Filer:		John Christopher Kappos/Saundra Carr		
Attorney Docket Number:		443,773-051 (240D1)		
Filed as Small Entity				
Utility under 35 USC 111(a) Filing Fees				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Basic Filing:				
Basic Filing:				
Claims in excess of 20	2202	58	31	1798
Independent claims in excess of 3	2201	1	125	125
Miscellaneous-Filing:				
Basic Filing:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Extension-of-Time:				
Total in USD (\$)				1923

Electronic Acknowledgement Receipt

EFS ID:	14047360
Application Number:	12886429
International Application Number:	
Confirmation Number:	1557
Title of Invention:	APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT
First Named Inventor/Applicant Name:	Randall M. Katz
Customer Number:	1557
Filer:	John Christopher Kappos/Sandra Carr
Filer Authorized By:	John Christopher Kappos
Attorney Docket Number:	443,773-051 (240D1)
Receipt Date:	12886429
Filing Date:	14047360
Time Stamp:	12886429
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	yes
RAM confirmation Number	yes
Deposit Account	502862
Authorized User	yes

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	-51trans.pdf	85259	no	2
			a86c93861b1db842eae5ff5c762a614583fd1716		
Warnings:					
Information:					
2	Response to Election / Restriction Filed	-51AMD.pdf	46075	no	1
			fe9b3d9a51df1b0f628a3b46b70bbf16f5479e86		
Warnings:					
Information:					
1	Transmittal Letter	-51trans.pdf	85259	no	2
			a86c93861b1db842eae5ff5c762a614583fd1716		
Warnings:					
Information:					
4	Claims	-51CLAIMS.pdf	400985	no	11
			9f2dc570f37c50c8f4d3b34783e6dbac23757396		
Warnings:					
Information:					
5	Applicant Arguments/Remarks Made in an Amendment	-51REMARKS.pdf	66359	no	2
			2a2ff59d1bf27eb7dc5df49ecd58fc10a9f0d3fd		
Warnings:					
Information:					
6	Fee Worksheet (SB06)	fee-info.pdf	32169	no	2
			a79c801edbd022d74b2b414bc87fced188e3b0b8		
Warnings:					
Information:					
Total Files Size (in bytes):			680363		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application Of:)
) Group Art Unit: 3714
Randall M. Katz et al.)
) Examiner: COBURN, Corbett
Serial No.: 12/886,429)
) Confirmation No. 1557
Filed: September 20, 2010)
)
For: APPARATUS, SYSTEMS AND METHODS)
FOR IMPLEMENTING ENHANCED GAMING)
AND PRIZING PARAMETERS IN AN)
ELECTRONIC ENVIRONMENT)

AMENDMENT TRANSMITTAL

Via EFS-Web Transmission

Mail Stop: AMD

Commissioner for Patents
Alexandria, Virginia 22313-1450

Sir:

In response to the Office Action mailed September 20, 2012, transmitted herewith for filing in the above-identified application are:

- 1) Amendment and Response to Restriction Office Action (15 pages)

PETITION FOR EXTENSION OF TIME:

☐ Applicant(s) petitions for an extension of time under 37 CFR § 1.136 [fees: 37 CFR § 1.17(a)(1)-(3)] as indicated below:

☒ Applicant(s) claims Small entity Status.

EXTENSION (months)	FEE FOR SMALL ENTITY	FEE FOR OTHER THAN SMALL ENTITY
1 month	☐ \$ 75	☐ \$150
2 months	☐ \$285	☐ \$570
3 months	☐ \$645	☐ \$1,290

☒ If an additional extension of time is required, please consider this a petition therefor.

CERTIFICATE OF MAILING (37 C.F.R. §1.8a)

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being electronically transmitted to the Mail Stop: AMD; Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below via the USPTO EFS-Web filing system.

Date of Deposit
0498456-IR1.1

10/22/12

Saundra L. Carr

The fees for claims (37 CFR § 1.16(b)-(d)) have been calculated as shown below:

Total Claims	78	-	20	=	58	X	\$ 62	3596	
Independent Claims	4	-	5	=	1	X	\$250	250	
Multiple Dependent Claims	\$450	(if applicable)						☐	0
Terminal Disclaimer Fee \$160 - Large Entity (0 patent)								0	
TOTAL								3846	
Reduction by ½ for claiming Small Entity Status.								☒	1923
TOTAL EXTENSION and FILING FEES								\$1923	

- ☒ Please charge O'Melveny & Myers' Deposit Account No. **50-2862** in the amount of **\$1923**
- ☒ The Commissioner is authorized to charge O'Melveny & Myers' Deposit Account No. **50-2862** for any fees required under 37 CFR §§ 1.16 and 1.17 that are not covered, in whole or in part, by a check enclosed herewith and to credit any overpayments to said Deposit Account **50-2862**.

Respectfully submitted,

O'MELVENY & MYERS LLP

Dated: 10/22/2012

By: David B. Murphy
David B. Murphy
Reg. No. 31,125

/slc

34263
PATENT TRADEMARK OFFICE

O'Melveny & Myers LLP
610 Newport Center Drive
17th Floor
Newport Beach, CA 92660
(949) 760-9600

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875					Application or Docket Number 12/886,429		Filing Date 09/20/2010		☐ To be Mailed	
APPLICATION AS FILED – PART I										
(Column 1)			(Column 2)			SMALL ENTITY ☒ OR		OTHER THAN SMALL ENTITY		
FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)	OR	RATE (\$)	FEE (\$)			
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A				
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A			N/A				
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A				
TOTAL CLAIMS (37 CFR 1.16(j))	minus 20 =	*	X \$	=	OR	X \$	=			
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$	=		X \$	=			
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).									
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))										
			TOTAL			TOTAL				
APPLICATION AS AMENDED – PART II										
(Column 1)			(Column 2)			SMALL ENTITY OR		OTHER THAN SMALL ENTITY		
AMENDMENT	10/22/2012	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	* 78	Minus	** 20	= 58	X \$31 =	1798	OR	X \$ =	
	Independent (37 CFR 1.16(h))	* 5	Minus	***4	= 1	X \$125 =	125	OR	X \$ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
					TOTAL ADD'L FEE	1923	OR	TOTAL ADD'L FEE		
AMENDMENT	Total (37 CFR 1.16(i))	*	Minus	**	=	X \$ =		OR	X \$ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X \$ =		OR	X \$ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE		
<p>* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.</p> <p>** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".</p> <p>*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".</p> <p>The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.</p>										

Legal Instrument Examiner:
/GOIGA DUCKETT/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/886,429	09/20/2010	Randall M. Katz	443,773-051 (240D1)	1557
34263	7590	09/20/2012		
O'Melveny & Myers LLP IP&T Calendar Department LA-13-A7 400 South Hope Street Los Angeles, CA 90071-2899			EXAMINER COBURN, CORBETT B	
			ART UNIT 3714	PAPER NUMBER
			NOTIFICATION DATE 09/20/2012	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipcalendardept@omm.com
cpacheco@omm.com
scarr@omm.com

Office Action Summary	Application No. 12/886,429	Applicant(s) KATZ ET AL.	
	Examiner CORBETT B. COBURN	Art Unit 3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-16 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☐ Claim(s) ____ is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☒ Claim(s) 1-16 are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) ☐ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413) |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) ☐ Information Disclosure Statement(s) (PTO/SB/08) | 5) ☐ Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) ☐ Other: ____. |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-9, drawn to an entertainment method, classified in class 463, subclass 26.
 - II. Claims 10-12, drawn to a method of electronic interaction, classified in class 463, subclass 1.
 - III. Claim 13, drawn to a plurality of games, classified in class 463, subclass 17.
 - IV. Claims 14-16, drawn to an offer/acceptance game, classified in class 463, subclass 16.
2. The inventions are distinct, each from the other because of the following reasons:
3. Inventions I and III are directed to related inventions. The related inventions are distinct if: (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j). In the instant case, the inventions as claimed have materially different designs since Group I appears to apply to a single game and Group III recites two games. Furthermore, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

Art Unit: 3714

4. Due to the large number of groups, Examiner will not provide an analysis of all of the permutations. If Applicant desires, Examiner will provide an analysis of the reasons the elected invention is distinct from the other inventions upon request.

5. Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and/or examination burden if restriction were not required because at least the following reason(s) apply:

(a) the inventions have acquired a separate status in the art in view of their different classification;

(b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;

(c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);

(d) the prior art applicable to one invention would not likely be applicable to another invention;

(e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically

Art Unit: 3714

point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Examiner's Note

7. Applicant's claims are extremely broad. Applicant is strongly urged to tailor the claims to more narrowly reflect the Applicant's actual invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CORBETT B. COBURN whose telephone number is (571)272-4447. The examiner can normally be reached on 8-5:30.

Art Unit: 3714

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Lewis can be reached on (571) 272-7673. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CORBETT B COBURN/
Primary Examiner
Art Unit 3714



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
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BIB DATA SHEET

CONFIRMATION NO. 1557

SERIAL NUMBER	FILING or 371(c) DATE RULE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
12/886,429	09/20/2010	463	3714	443,773-051 (240D1)

APPLICANTS
 Randall M. Katz, Beverly Hills, CA;
 Gary Dawson, West Lake Village, CA;

**** CONTINUING DATA *******
 This application is a DIV of 10/654,585 09/02/2003 PAT 7,798,896
 which is a CIP of 10/123,861 04/15/2002
 which is a CIP of 09/965,620 09/26/2001 PAT 6,811,484
 which is a CIP of 09/672,179 09/27/2000 PAT 6,488,280

**** FOREIGN APPLICATIONS *******

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED *** SMALL ENTITY ****
 10/05/2010

Foreign Priority claimed 35 USC 119(a-d) conditions met Verified and Acknowledged	☐ Yes ☒ No ☐ Yes ☒ No /CORBETT B COBURN/ Examiner's Signature	☐ Met after Allowance Initials	STATE OR COUNTRY CA	SHEETS DRAWINGS 25	TOTAL CLAIMS 16	INDEPENDENT CLAIMS 4
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ADDRESS
 O"Melveny & Myers LLP
 IP&T Calendar Department LA-13-A7
 400 South Hope Street
 Los Angeles, CA 90071-2899
 UNITED STATES

TITLE
 APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING
 PARAMETERS IN AN ELECTRONIC ENVIRONMENT

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STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Randall M. Katz (o/r 443,773-051)

Application No./Patent No.: 12/886,429 Filed/Issue Date: September 20, 2010

Titled: **APPARATUS, SYSTEMS AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT**

MILESTONE ENTERTAINMENT LLC, a corporation
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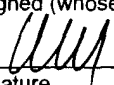
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RANDALL M. KATZ

Printed or Typed Name

7/12/11
Date

President

Title

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EFS ID:	10783692
Application Number:	12886429
International Application Number:	
Confirmation Number:	1557
Title of Invention:	APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT
First Named Inventor/Applicant Name:	Randall M. Katz
Customer Number:	1557
Filer:	Jennifer M. Pascua/Saundra Carr
Filer Authorized By:	Jennifer M. Pascua
Attorney Docket Number:	443,773-051 (240D1)
Receipt Date:	22-AUG-2011
Filing Date:	20-SEP-2010
Time Stamp:	1557
Application Type:	Utility under 35 USC 111(a)

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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Assignee showing of ownership per 37 CFR 3.73(b).	-51Statement.pdf	75059 ed44bf1c53d5fe9d4d11120533fd80c3a17b2c33	no	1

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/886,429	09/20/2010	Randall M. Katz	443,773-051 (240D1)

CONFIRMATION NO. 1557

PUBLICATION NOTICE



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34263
O'Melveny & Myers LLP
IP&T Calendar Department LA-13-A7
400 South Hope Street
Los Angeles, CA 90071-2899

Title: APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT

Publication No. US-2011-0009177-A1

Publication Date: 01/13/2011

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The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

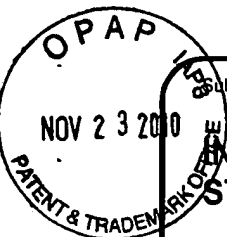
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STATEMENT BY APPLICANT**

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Sheet 1 of 4

Complete if Known

Application Number	12/886,429
Filing Date	September 20, 2010
First Named Inventor	Randall M. Katz et al
Group Art Unit	3714
Examiner Name	Not Yet Assigned
Attorney Docket Number	443,773-51

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		US-3,873,092		Fagan	03/25/1975	
		US-4,348,027		Escamilla-Kelly	09/07/1982	
		US-4,582,324		Koza et al	04/15/1986	
		US-4,772,025		James et al	09/20/1988	
		US-4,836,546		DiRe et al	06/06/1989	
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		US-5,407,199		Gumina	04/18/1995	
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STATEMENT BY APPLICANT**

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Sheet 2 of 4

Complete if Known

Application Number	12/886,429
Filing Date	September 20, 2010
First Named Inventor	Randall M. Katz et al
Group Art Unit	3714
Examiner Name	Not Yet Assigned
Attorney Docket Number	443,773-51

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		US-5,931,467		Kamille	08/03/1999	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet	3	of	4
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Complete if Known

Application Number	12/886,429
Filing Date	September 20, 2010
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		US-7,052,010	B2	Katz et al	05/30/2006	
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		US-2003/0189288	A1	Katz et al	10/09/2003	
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Sheet 4 of 4

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Application Number	12/886,429
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First Named Inventor	Randall M. Katz et al
Group Art Unit	3714
Examiner Name	Not Yet Assigned
Attorney Docket Number	443,773-51

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume–issue number(s), publisher, city and/or country where published.	T ²
		Finders Keepers, 1996 (retrieved from www.stewarttelevision.com on 02/25/04)	
		Top That II, 1996 (retrieved from www.stewarttelevision.com on 02/25/04)	
		\$10,000 Championship, one version for \$50,000 broadcast in 1996 (retrieved from www.stewarttelevision.com on 02/25/04)	
		SCHWARTZ, et al., "The Encyclopedia of TV Game Shows, 3 rd Edition, pp 22, 23, 48-49, 90, 98-99, 176-180.	
		www.geocities.com/TelevisionCity/1856/rules.htm , CARD SHARKS, April 24, 1978, 1-3.	
		Answer to First Amended Complaint, filed June 12, 2007, in Sande Stewart Television, Inc. v. Milestone Entertainment, LLC, Civil Action No. CV-07-2606 GHK(CWx)	
		First Amended Complaint for Declaratory Judgment, filed May 22, 2007, in Sande Stewart Television, Inc. v. Milestone Entertainment, LLC, Civil Action No. CV-07-2606 GHK(CWx)	
		Stipulation for Dismissal Without Prejudice Pursuant to FRCP 41(a) in Sande Stewart Television, Inc. v. Milestone Entertainment, LLC, Civil Action No. CV-07-2606 GHK(CWx)	
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(21) International Application Number: PCT/US98/05787 (22) International Filing Date: 20 March 1998 (20.03.98) (30) Priority Data: <table border="0"> <tr> <td>08/822,709</td> <td>21 March 1997 (21.03.97)</td> <td>US</td> </tr> <tr> <td>08/841,791</td> <td>5 May 1997 (05.05.97)</td> <td>US</td> </tr> <tr> <td>08/920,116</td> <td>26 August 1997 (26.08.97)</td> <td>US</td> </tr> <tr> <td>09/045,386</td> <td>20 March 1998 (20.03.98)</td> <td>US</td> </tr> <tr> <td>09/045,036</td> <td>20 March 1998 (20.03.98)</td> <td>US</td> </tr> <tr> <td>09/045,347</td> <td>20 March 1998 (20.03.98)</td> <td>US</td> </tr> <tr> <td>09/045,518</td> <td>20 March 1998 (20.03.98)</td> <td>US</td> </tr> <tr> <td>09/045,084</td> <td>20 March 1998 (20.03.98)</td> <td>US</td> </tr> </table> (71) Applicant: WALKER ASSET MANAGEMENT LIMITED PARTNERSHIP [US/US]; Four High Ridge Park, Stamford, CT 06905-1325 (US). (72) Inventors: WALKER, Jay, S.; 124 Spectacle Lane, Ridgefield, CT 06877 (US). VAN LUCHENE, Andrew, S.; 13-2a Clarmore Drive, Norwalk, CT 06850 (US). JORASCH, James, A.; Apartment 5G, 25 Forest Street, Stamford, CT 06901 (US). JINDAL, Sanjay, K.; 52 Village Walk, Wilton, CT 06987 (US). ALDERUCCI, Dean, A.; 19-8 Prospect Ridge Road, Ridgefield, CT 06877 (US).		08/822,709	21 March 1997 (21.03.97)	US	08/841,791	5 May 1997 (05.05.97)	US	08/920,116	26 August 1997 (26.08.97)	US	09/045,386	20 March 1998 (20.03.98)	US	09/045,036	20 March 1998 (20.03.98)	US	09/045,347	20 March 1998 (20.03.98)	US	09/045,518	20 March 1998 (20.03.98)	US	09/045,084	20 March 1998 (20.03.98)	US	(74) Agents: ALDERUCCI, Dean et al.; Walker Digital Corpo- ration, Intellectual Property Dept., Five High Ridge Park, Stamford, CT 06905-1326 (US). (81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>Without international search report and to be republished upon receipt of that report.</i>
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(54) Title: METHOD AND SYSTEM FOR PROCESSING SUPPLEMENTARY PRODUCT SALES AT A POINT-OF-SALE TERMINAL (57) Abstract <p>A POS terminal determines an upsell to offer in exchange for the change due to a customer in connection with a purchase. The point-of-sale terminal preferably maintains a database of at least one upsell price and a corresponding upsell to offer a customer in exchange for the change due to him. If the customer accepts the upsell, the cashier so indicates by pressing a selection button on the POS terminal. The required payment amount for the customer to pay is then set equal to the rounded price, rather than the purchase price. Thus, the customer receives the upsell in exchange for the coins due to him, and the coins need not be exchanged between the customer and the POS terminal.</p>																										

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METHOD AND SYSTEM FOR PROCESSING
SUPPLEMENTARY PRODUCT SALES
AT A POINT OF SALE TERMINAL

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FIELD OF THE INVENTION

The present invention relates to point-of-sale terminals, and, more specifically, to methods and systems for processing product sales at point-of-sale terminals.

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BACKGROUND OF THE INVENTION

This invention relates to a lottery ticket transaction system. More particularly, the present invention relates to a system and a method for selling lottery tickets using point-of-sale ("POS") terminals that generate sales receipts containing both merchandise sales information and lottery ticket information.

Many states in the United States, as well as some foreign countries, have government-conducted lottery systems. Government-conducted lotteries offer the public a desirable product (usually the chance to win a large cash prize), and have the benefit of increasing governmental revenues without burdening the public with additional or increased taxes. In many instances, the revenue generated from a governmental lottery is dedicated to a particular purpose or goal, such as improving the education system or reducing property taxes.

25 In a typical government-conducted lottery system, a central lottery computer is used to communicate with dedicated lottery terminals. A player selects numbers on a lottery playslip, and the lottery terminal operator inserts the lottery playslip into a reader at the

lottery terminal, which optically reads the lottery playslip using a known mark-sense process. The dedicated lottery terminal then communicates the player's selected numbers to a central lottery computer which in turn stores them. After the lottery numbers have been stored, the dedicated lottery terminal, under the control of the central lottery computer,

5 prints and issues the lottery ticket.

One popular lottery game, known as "lotto," typically requires the player to choose six numbers from one to forty-two. The selected group of numbers are then compared to the winning lottery numbers, which have been randomly selected from the larger pool of numbers, from one to forty-two, at some specified time and date after purchase of the lotto
10 ticket, usually once or twice each week. To win a prize, the lotto ticket numbers must be equal to all or some of the winning lottery numbers.

While players may select their own lottery numbers, most lotto games provide the option of having the central lottery computer system select random "quick-pick" lottery numbers instead. This saves the purchaser the time and inconvenience of picking his or her
15 own numbers. These automatic lottery number generation systems are usually known as "quick-pick" systems.

A variety of games may be played in a typical lottery. In conventional lottery games, a player purchases a lottery ticket. Inscribed on that lottery ticket are one or more lottery numbers and a serial number. The serial number functions as a simple method of fraud
20 prevention, because it uniquely identifies each lottery ticket sold. The lottery number also allows both the player and the lottery system to identify a winner; specifically, the lottery numbers are compared by the player to a "winning number list", to determine if the player has won a prize.

There are also instant lottery games in which the outcome is determined prior to the sale of the lottery ticket. By uncovering concealed indicia inscribed on the lottery ticket, the player can determine if the lottery ticket is a winner - immediately after purchase.

Some foreign countries (e.g. Germany) allow a lottery player to purchase fractional
5 lottery tickets. However, these lottery systems only allow the player to purchase fixed fractions of certain high-priced lottery tickets (e.g., a half, or quarter share of a lottery ticket). In these instances, if the lottery ticket is a winner, the purchaser will only receive one-half or one-quarter of the full prize amount.

The majority of lottery tickets are sold by grocery, liquor and convenience stores.
10 These retail stores typically place the dedicated lottery terminal away from one or more POS terminals used for merchandise transactions. This physical separation is to ensure that the merchandise transaction line is not slowed-down or blocked by customers wishing to make lottery ticket purchases. In addition, since the lottery terminals have a separate and distinct accounting system, there is no need to co-locate the POS terminals and dedicated lottery
15 terminals.

However, some customers may consider it annoying to make two separate transactions, i.e., merchandise and lottery tickets, on two different terminals within the same store. Separate terminals may also force the customers to wait in two separate lines, or may slow down the overall merchandise check-out procedure while a single store clerk performs
20 two separate transactions on two terminals. Besides annoying the merchandise-only customers, these inconveniences also reduce the impulse purchasing of lottery tickets, which in turn leads to loss of revenue for the government and the store.

There are other disadvantages with using two separate and distinct terminals for merchandise transactions and lottery ticket transactions. The government usually bears the

costs of purchasing, leasing, installing and maintaining the dedicated lottery terminals.

There are also the considerable costs of resupplying the lottery ticket paper and ink for each dedicated lottery terminal. Moreover, many retail stores with multiple checkout lines and registers, such as supermarkets, do not have the resources to support dedicated lottery

- 5 terminals at every check-out register. In addition, a dedicated lottery terminal uses counter space that could otherwise be devoted to revenue-producing merchandise displays. It is also costly to train store personnel in the operation of two distinct types of transaction terminals. These factors reduce the availability of lottery tickets to consumers, and thus reduce governmental revenue, by limiting the number of locations that sell lottery tickets.

- 10 After many years of steadily increasing profits, many state-run lotteries have seen a downturn in profits. Improving the ease of purchasing lottery tickets and increasing their availability has become a primary concern as many states are modernizing their lottery systems. The current lottery system does not allow for the sale of fractional value lottery tickets at retail point of sale terminals. There is a significant loss of revenue from this lost
15 opportunity to buy fractional value lottery tickets. Accordingly, there is a need for a system that solves the above described problems.

Most stores that are visited by customers have one or more point-of-sale ("POS") terminals, such as cash registers. Store cashiers use POS terminals for calculating the total price of a purchase (one or more products) and the amount of change due to a customer.

- 20 Some POS terminals furthermore track purchases made and adjust a database of store inventory accordingly.

The amount of change due is the difference between the purchase price and the amount tendered by the customer. Customers typically tender whole number cash amounts in the form of bills of paper money, while purchase prices are most often non-whole number

amounts. Accordingly, the amount of change due to a customer at a POS terminal typically includes one or more coins, which the POS terminal or cashier dispenses to the customer.

Receiving and carrying change, especially coins, is an annoyance to many customers. Consequently, customers often are forced to tender non-whole number cash amounts in order to dispose of their unwanted coins and/or reduce the coins that would otherwise be given to them as change for their purchase. Coins and bills that are tendered by the customer are collected by the cashier at the POS terminal.

Both dispensing coins to and collecting coins from a customer increases the amount of time a cashier spends processing a purchase, and therefore increases the amount of time that customers wait in line at a POS terminal. Accordingly, businesses must pay wages for time spent handling coins, and customers must experience delays as coins are exchanged between cashiers and customers.

In addition, it is possible that the cashier will make a mathematical error and dispense the wrong amount of change. Customers often anticipate such an error and count their change to assure that they received the correct amount. Such customers typically count their change before leaving the POS terminal, further delaying other customers.

Businesses incur costs associated with counting, rolling, banking and otherwise handling coins. By some estimates, businesses expend hundreds of thousands of hours and hundreds of millions of dollars each year just to handle coins.

In summary, the exchange of change, especially coins, between customers and POS terminals is costly, time-consuming and undesirable. Unfortunately, conventional POS terminals merely calculate purchase prices and amounts of change due, and cannot reduce the amount of change due nor the exchange of coins.

Accordingly, it would be advantageous to provide a system and method that reduced the amount of change due, and therefore reduced the coins exchanged between customers and cashiers at a POS terminal.

Lotteries are extremely popular games that generate significant revenues for
5 sponsoring states that offer such games. In a typical lottery, a player (ticket holder) purchases a lottery ticket having ticket numbers and a serial number inscribed thereon. The ticket numbers allow both the ticket holder and a lottery agent to identify whether the ticket holder has won a prize. The serial number uniquely identifies the lottery ticket, and is typically recorded by a lottery agency so that the lottery ticket may be validated. For
10 example, the serial number may be used to verify whether the ticket numbers inscribed on a ticket match those ticket numbers that the lottery agency has recorded as associated with that lottery ticket.

A typical lottery ticket has six ticket numbers, each selected from a range, such as the range of from one to forty-nine. The six ticket numbers may have been selected by the
15 ticket holder or, at the request of the ticket holder, randomly selected by the lottery terminal printing the ticket. On a drawing date, the lottery agency randomly selects six ticket numbers, which are deemed "winning" ticket numbers. A lottery ticket having ticket numbers that match some or all of the winning ticket numbers is a winning ticket, and the corresponding holder of the lottery ticket wins a prize.

20 The grandparent application of the present application, Patent Application No. 08/822,709, entitled SYSTEM AND METHOD FOR PERFORMING LOTTERY TICKET TRANSACTIONS UTILIZING POINT-OF-SALE TERMINALS, filed on March 21, 1997, discloses a system and method by which fractional lottery tickets may be sold to a customer at a point-of-sale ("POS") terminal in exchange for change due. For example, a customer

may bring a purchase to a POS terminal, and the POS terminal may calculate the purchase price to be \$4.74. If the purchase price is rounded to the nearest \$1, the change due is \$5.00 - \$4.74 = \$0.26. Accordingly, the customer may be sold a 26% share of a \$1 lottery ticket in lieu of the change due. If the lottery ticket wins, 26% of the corresponding prize is awarded

5 to the customer.

There are numerous advantages to providing a fractional lottery ticket in exchange for change due. As described in the parent application of the present application, Patent Application No. 08/920,116, entitled METHOD AND SYSTEM FOR PROCESSING SUPPLEMENTARY PRODUCT SALES AT A POINT-OF-SALE TERMINAL, filed on

10 August 26, 1997, dispensing and collecting coins is costly and burdensome. Furthermore, many customers consider coins to be dirty, and would prefer not to handle them. Thus, many customers will find the exchange of change due for a fractional lottery ticket to be very desirable.

Unfortunately, some state lottery agencies may be reluctant to change their practices

15 by issuing lottery tickets for fractional amounts. Such state lottery agencies may instead prefer to offer tickets in only a few predetermined, rounded amounts, such as tickets for \$1, \$2 and \$5 only. In some circumstances, the ability to offer fractional lottery tickets may require substantial modifications to the hardware and software of lottery terminals used throughout one or more states. Although such changes may ultimately be profitable, the

20 initial cost may be perceived to be unduly burdensome, and the eventual profit to be made may appear too speculative. In summary, the issuance of fractional lottery tickets by state lottery agencies may not be practical in all circumstances.

Accordingly, it would be advantageous to facilitate the purchase of fractional lottery tickets without requiring significant changes in existing lottery systems.

Point-of-sale ("POS") terminals, such as cash registers, are used in a wide variety of businesses for performing such processes as calculating the total price of a purchase (good or service) and calculating the amount of change due to a customer. Depending on their level of sophistication, such POS terminals may be further useful in performing related functions such as inventory management by tracking purchases made and adjusting a database of store inventory accordingly. In addition, POS terminals may be used with and/or function as an offering system.

The parent application of the present application, Patent Application No. 08/920,116, entitled METHOD AND SYSTEM FOR PROCESSING SUPPLEMENTARY PRODUCT SALES AT A POINT-OF-SALE TERMINAL, filed on August 26, 1997, discloses a system in which a customer at a POS terminal is offered an "upsell" in exchange for an amount of change he is due. An upsell, as defined therein and used herein, means a product (good or service) which is offered along with a purchase. Types of upsells include (i) an upgrade from a first product to a second product different from the first product, (ii) an additional product, (iii) a voucher which is redeemable for a product or a discount thereon, and (iv) an entry in a sweepstakes, contest, lottery or other game. For example, a customer purchasing a first product for \$1.74 may be offered a second product in exchange for \$0.26 (the change due if the customer tenders \$2.00). Various other types of upsells may be used without departing from the scope and spirit of the present invention.

As also disclosed in the aforementioned parent application, many different criteria may be used in determining an upsell. For example, a POS terminal may calculate the purchase price, and round the purchase price to the nearest dollar to generate a round-up (change) amount. The POS terminal in turn determines which of a plurality of upsells may be profitably exchanged for the round-up amount.

It would be advantageous to provide other methods of determining upsells. It would be particularly advantageous to provide a method and apparatus for determining an upsell which personnel, such as a store manager or POS terminal operator, may easily understand and adjust.

5 Point-of-sale ("POS") terminals, such as cash registers, are used in a wide variety of businesses for performing such processes as calculating the total price of a purchase (goods or services) and calculating the amount of change due to a customer. Some POS terminals furthermore track items sold and adjust a database of store inventory accordingly.

A POS terminal may perform a supplementary process in addition to performing the
10 processes listed above. A supplementary process can increase sales, and thereby increase the average profit gained per transaction. One such supplementary process is described in a parent application of the present application, Patent Application No. 08/920,116, entitled METHOD AND SYSTEM FOR PROCESSING SUPPLEMENTARY PRODUCT SALES AT A POINT-OF-SALE TERMINAL, filed on August 26, 1997. Described therein is a
15 supplementary process in which a customer at a POS terminal is offered an "upsell" in exchange for an amount of change due. The POS terminal determines an upsell in dependence on a purchase of the customer, and also determines an upsell price (the amount of change due) based on the purchase. For example, a customer purchasing a first product for \$1.74 and tendering \$2.00 may be offered a second product in lieu of the \$0.26 change
20 due. The upsell price, \$0.26, thus depends on the purchase price \$1.74.

Another supplementary process is a computer-determined "suggestive sell". U.S. Patent No. 5,353,219 describes a system for suggesting items for a customer to purchase from a primary category at conventional item prices. Still another supplementary process is described in a parent application of the present application, Patent Application No.

08/841,791, entitled METHOD AND APPARATUS FOR SELLING SUBSCRIPTIONS TO PERIODICALS IN A RETAIL ENVIRONMENT, filed on May 5, 1997. Described therein is a supplementary process in which a customer purchasing an issue of a periodical at a POS terminal is offered the opportunity at that time to purchase a subscription to that
5 periodical.

Such supplementary processes may be performed solely within the POS terminal itself. For example, a cash register may be programmed to calculate an amount of change due, and determine an upsell to offer in exchange for the change due. Alternatively, the supplementary process may be performed with the assistance of a device in communication
10 with the cash register. For example, a remote server computer connected to the cash register via a communications network may determine an upsell to offer in exchange for the change due.

A supplementary process performed at a POS terminal may undesirably slow the rate at which customer transactions are completed. For example, it may take several seconds for
15 a cashier operating a POS terminal to offer a customer an upsell in exchange for an amount of change due, and for the customer to decide whether to accept such an offer. Offering a customer a choice of several upsells in exchange for an amount of change due could impose yet further delays on completing customer transactions.

Such delays may be acceptable under some conditions, yet unduly burdensome under
20 other conditions. For example, during lunch or other times of day, there may be a long line at a POS terminal. It would be inadvisable to add to the wait of each customer in line by performing a supplementary process as well. However, eliminating the supplementary processes may speed the completion of customer transactions, but at the cost of the extra

profit derived from such supplementary processes. Accordingly, a need exists for controlling the performance of supplementary processes at POS terminals.

Point-of-sale ("POS") terminals, such as cash registers, are used in a wide variety of businesses for performing such processes as calculating the total price of a purchase (goods or services) and calculating the amount of change due to a customer. Some POS terminals furthermore track purchases made and adjust a database of store inventory accordingly. As described in the parent application of the present application, Patent Application No. 08/920,116, entitled METHOD AND SYSTEM FOR PROCESSING SUPPLEMENTARY PRODUCT SALES AT A POINT-OF-SALE TERMINAL, filed on August 26, 1997, a customer at a POS terminal is offered an "upsell" in exchange for an amount of change due. The POS terminal determines an upsell in dependence on a purchase of the customer, and also determines an "upsell price" (the amount of change due) based on the purchase. For example, a customer purchasing a first product for \$1.74 and tendering \$2.00 may be offered a second product, perhaps at an attractively discounted price, in lieu of the \$0.26 change due. The upsell price, \$0.26, thus depends on the purchase price \$1.74; the upsell price is not fixed like most conventional prices for items.

As described in the aforementioned parent application, offering upsells in exchange for change due has significant advantages. For example, customers are typically adverse to handling change, and would welcome the opportunity to dispense with it. In addition, the customer derives satisfaction from a sale at an attractively-low price.

Typically, a business may have several different upsells that may be offered. In fact, for any particular purchase, it may be possible to offer several different upsells. The particular upsell that is actually offered to a particular customer may depend on a number of criteria associated with the purchase, such as the change amount, the time of day and the

items purchased. Since there may be so many possible upsells to offer any particular customer, it may be difficult or impossible to determine which upsell that customer is likely to accept.

In addition to the difficulty of selecting an upsell to offer, offering an upsell may in some circumstances require time. However, there is no guarantee that the time spent offering an upsell will prompt the customer to accept the upsell and, consequently, provide revenue to the offeror. Thus, many offered upsells will be unaccepted, thus resulting in a waste of time and effort. Accordingly, it would be advantageous to eliminate the uncertainty that is inherent in offering upsells.

Point-of-sale ("POS") terminals, such as cash registers, are used in a wide variety of businesses for performing such processes as calculating the total price of a purchase (goods or services) and calculating the amount of change due to a customer. In addition, POS terminals may also be used with an offering system in order to provide offers to customers. Such offering systems may be intended to increase sales, and thereby increase the average profit gained per transaction.

One type of offering system is described in the parent application of the present application, Patent Application No. 08/920,116, entitled METHOD AND SYSTEM FOR PROCESSING SUPPLEMENTARY PRODUCT SALES AT A POINT-OF-SALE TERMINAL, filed on August 26, 1997. As described therein, a customer at a POS terminal is offered an "upsell" in exchange for an amount of change he is due. The POS terminal determines an upsell in dependence on a purchase of the customer, and also determines an upsell price (the amount of change due) based on the purchase. For example, a customer purchasing a first product for \$1.74 and tendering \$2.00 may be offered a second product in lieu of the \$0.26 change due. The upsell price, \$0.26, thus depends on the purchase price

\$1.74. Another type of offering system is a computer-determined "suggestive sell". U.S. Patent No. 5,353,219 describes a system for suggesting items for a customer to purchase at conventional item prices.

In an offering system, there are many possible offers which may be provided to
5 customers. For example, in the above-described upsell offer, many different upsells may be offered to a customer in exchange for the particular amount of change due. An offer to a customer at a fast-food restaurant may include a soda, large French fries, or a dessert. Precisely which upsell to offer may be chosen according to a predetermined program at random, or manually by a manager or other operator.

10 Unfortunately, random or manual selection of an offer does not necessarily assure that the "best" (highest performing) offers will be provided to customers. What constitutes the "best" offer may be evaluated with respect to one or more criteria, yielding corresponding "performance rates" for the various offers. For example, the acceptance rate of an offer is a performance rate that may be used to evaluate the offer, since some offers
15 may be less likely to be accepted by customers than other offers. In addition, the profit derived from an accepted offer is another performance rate that may be used to evaluate the offer.

It may be difficult or impossible for a manager or other operator to identify the "best" offers (the offers with the highest performance rates). A manager is unlikely to have
20 knowledge of the true performance rates of a group of offers. A manager is also unlikely to have the time to analyze historical trends to identify the best offers. In addition, at different times of the day or days of the week, certain offers may be more attractive to customers than others. Unanticipated events, such as a high state lottery jackpot or a good article in a magazine, may also make certain offers more attractive. Such circumstances impede

attempts by a manager to identify the best offers. Accordingly, a need exists for controlling offers that are provided at a point-of-sale terminal.

SUMMARY OF THE INVENTION

5 It is an object of the present invention to provide methods and systems for offering selected products in exchange for the amount of change due at POS terminals.

Generally, according to one aspect of the present invention, a POS terminal determines an upsell to exchange for the change due to a customer in connection with his purchase. The point-of-sale terminal preferably maintains a database of at least one upsell
10 price and a corresponding upsell to offer a customer in exchange for the change due to him. The upsells and upsell prices are established so that upsells are profitably exchanged for the change due, thus providing the business with profit and the customer with value if the upsell is accepted.

When a customer brings a purchase to a POS terminal, the POS terminal generates
15 the purchase price and sets a "required payment amount" to be equal to the purchase price. The required payment amount indicates the amount the customer is expected to pay. The POS terminal then generates a rounded price, preferably by rounding up the purchase price to a whole number, and calculates therefrom a round-up amount equal to the difference between the purchase price and the rounded price. Accordingly, the round-up amount
20 indicates the coins due as change.

By comparing the calculated round-up amount with at least one of the upsell prices in the database, the POS terminal may determine whether the round-up amount corresponds to any of the upsell prices. If so, the POS terminal identifies the upsell corresponding to this upsell price, and outputs signals indicative of the identified upsell. The output signals are

preferably displayed text or graphics that explain to the customer and/or the cashier that the upsell may be purchased for the specified amount of change due.

If the customer accepts the upsell, the cashier so indicates by pressing a selection button on the POS terminal. The required payment amount for the customer to pay is then
5 set equal to the rounded price, rather than the purchase price. Thus, the customer receives the upsell in exchange for the coins due to him, and the coins need not be exchanged between the customer and the POS terminal.

BRIEF DESCRIPTION OF THE DRAWINGS

10

FIG. 1 is a block diagram of a system in accordance with the present invention.

FIG. 2 is a block diagram of the POS controller of FIG. 1.

FIG. 3 is a block diagram of the POS terminal of FIG 1.

FIG. 4 is a block diagram of the lottery data processing system.

15 FIG. 5 is a table depicting the local lottery ticket database within the POS controller of FIG 3.

FIG. 6 is a table depicting the lottery ticket database within the lottery data processing system of FIG 4.

FIG. 7 is a table depicting the POS controller database within the lottery data
20 processing system of FIG 4.

FIG. 8 is a flow chart depicting the lottery transaction at the POS terminal.

FIG. 9 is an example of a store sales receipt in accordance with the preferred embodiment of the present invention.

FIG. 10 is a flow chart of the operation of the POS controller.

FIG. 11 is a flow chart of the operation of the lottery data processing system.

FIG. 12 is a flow chart depicting the telephone authentication process.

FIG. 13A is a schematic illustration of a POS terminal provided in accordance with the present invention.

5 FIG. 13B is a schematic illustration of another embodiment of the POS terminal of FIG. 13A.

FIG. 14 is a flow chart illustrating a method of the present invention for determining an upsell at a POS terminal.

FIG. 15 is an exemplary illustration of a storage area of the POS terminal of FIG. 10 13A.

FIG. 16 is a schematic illustration of an upsell database of the POS terminal of FIG. 13A.

FIG. 17 is a schematic illustration of a customer database of the POS terminal of FIG. 13A.

15 FIG. 18 is a schematic illustration of an inventory price database of the POS terminal of FIG. 13A.

FIG. 19 is a schematic illustration of an offered price database of the POS terminal of FIG. 13A.

FIG. 20 is a flow chart illustrating a method of the present invention for evaluating a 20 counter-offer for an upsell at a POS terminal.

FIG. 21 is a schematic illustration of an identifier database of the POS terminal of FIG. 13A.

FIG. 22 is a schematic illustration of POS terminal connected to a lottery data processing system.

FIG. 23 is a schematic illustration of another embodiment of the customer database of the POS terminal of FIG. 13A.

FIG. 24A is a flow chart illustrating a method of the present invention for storing customer preferences.

5 FIG. 24B is a flow chart illustrating a method of the present invention for storing customer preferences.

FIG. 25 is a flow chart illustrating a method of the present invention for applying previously-selected customer preferences.

FIG. 26 is a flow chart illustrating a method of the present invention for receiving a
10 donated upsell.

FIG. 27 is a flow chart illustrating another method of the present invention for determining an upsell at a POS terminal.

FIG. 28 is a schematic illustration of a network of POS terminals provided in accordance with the present invention.

15 FIG. 29 is a schematic illustration of a store controller of the network of FIG. 28.

FIG. 30 is a schematic illustration of a POS terminal of the network of FIG. 28.

FIG. 31 is a schematic illustration of an alternate embodiment of a POS terminal of the network of FIG. 28.

FIG. 32 is a schematic illustration of a ticket supply database of the store controller
20 of FIG. 29.

FIG. 33 is a schematic illustration including exemplary data for the ticket supply database of FIG. 32.

FIG. 34 is a schematic illustration of a transaction database of the store controller of FIG. 29.

FIG. 35 is a schematic illustration of records of a fractional ticket database of the store controller of FIG. 29.

FIG. 36 is a schematic illustration including further exemplary data for the ticket supply database of FIG. 32.

5 FIG. 37 is a flow chart illustrating a method for allocating portions of lottery tickets.

FIG. 38 is a schematic illustration of a winning lottery ticket database of the store controller of FIG. 29.

FIG. 39 is a schematic illustration of a frequent shopper database of the store controller of FIG. 29.

10 FIG. 40 is a flow chart illustrating a method for redeeming a fractional lottery ticket.

FIG. 41 is a schematic illustration of a POS terminal provided in accordance with the present invention.

FIG. 42 is a schematic illustration of another embodiment of the POS terminal of FIG. 41.

15 FIG. 43 is a schematic illustration of an inventory database of the POS terminal of FIG. 41.

FIG. 44 is a schematic illustration of a possible upsells database of the POS terminal of FIG. 41.

FIG. 45 is a schematic illustration of an embodiment of an upsell offer database of
20 the POS terminal of FIG. 41.

FIG. 46 is a schematic illustration of another embodiment of the upsell offer database of the POS terminal of FIG. 41.

FIG. 47 is a schematic illustration of another embodiment of the upsell offer database of the POS terminal of FIG. 41.

FIG. 48 is a schematic illustration of another embodiment of the upsell offer database of the POS terminal of FIG. 41.

FIG. 49 is a flow chart illustrating a method for providing a supplementary product sale at a POS terminal.

- 5 FIG. 50 is a schematic illustration of a POS terminal provided in accordance with the present invention.

FIG. 51 is a schematic illustration of another embodiment of the POS terminal of FIG. 50.

- FIG. 52 is a flow chart illustrating a method provided in accordance with the present
10 invention for controlling the performance of a supplementary process at a POS terminal.

FIG. 53 is a table illustrating an offer schedule that depends on an activity rate of a POS terminal.

FIG. 54 is a schematic illustration of an override decision manager of the POS terminal of FIG. 51.

- 15 FIG. 55 is a schematic illustration of a network of POS terminals.

FIG. 56 is a table illustrating an offer schedule that depends on an activity rate of a plurality of POS terminals.

FIG. 57 is a schematic illustration of a POS terminal provided in accordance with the present invention.

- 20 FIG. 58 is a schematic illustration of another embodiment of the POS terminal of FIG. 57.

FIG. 59 is a schematic illustration of a network of POS terminals.

FIG. 60 is a schematic illustration of an inventory database of a POS terminal.

FIG. 61 is a schematic illustration of a rounding code database of a POS terminal.

- 25 FIG. 62 is a schematic illustration of data used in determining an amount of money due as payment for items of a purchase and an upsell.

FIG. 63 is a schematic illustration that represents information relating to transactions.

FIG. 64 is a flow chart describing a method for determining a rounded price for a purchase that includes an upsell and one or more items.

5 FIG. 65 is a flow chart describing a method for determining a rounded price for a purchase that includes a plurality of upsells and one or more items.

FIG. 66 is a schematic illustration of data used in determining an amount of money due as payment for items of a purchase and a plurality of upsells.

FIG. 67 is a schematic illustration of a POS terminal provided in accordance with the
10 present invention.

FIG. 68 is a schematic illustration of another embodiment of the POS terminal of FIG. 67.

FIG. 69 is a schematic illustration of a network of POS terminals.

FIG. 70 is a table illustrating an embodiment of a database of offers.

15 FIG. 71 is a schematic illustration of a record of a transaction database.

FIG. 72 is a flow chart illustrating a method for controlling offers that are provided at one or more POS terminals.

FIG. 73 is a table illustrating an embodiment of a performance rate database.

FIG. 74 is a table illustrating another embodiment of a performance rate database.

20 FIG. 75 is a schematic illustration of databases employed in determining offers which continue to be provided.

FIG. 76 is a schematic illustration of another embodiment of databases employed in determining offers which continue to be provided.

FIG. 77 is a table illustrating another embodiment of a database of offers.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The present invention is directed to a system for performing lottery ticket transactions at
5 retail POS terminals without the customer having to wait for two transaction receipts, or go
to another check-out terminal to make other non-lottery ticket purchases. In about the same
amount of time it takes to ring up bread or milk at a POS terminal, the customer can also
purchase a "quick-pick" lottery ticket. This one-stop shopping facilitates the sale of lottery
tickets, and speeds the customer on his way. In addition, the present invention enables the
10 customer to purchase fractional lottery tickets which even further facilitates the sale of
lottery tickets. In particular, in cases where a customer makes other merchandise purchases,
instead of receiving change, he can request a fractional lottery ticket (equal to the change
amount). Accordingly, the present invention provides a consumer with a convenient and
efficient system to purchase lottery tickets.

15

The term "quick-pick" refers to a lottery ticket in which the lottery numbers are randomly
generated for the customer by the lottery system.

A fractional lottery ticket is a lottery ticket in which the customer will receive only a portion
20 of the winning prize in accordance with the fractional portion paid for the ticket as
compared to the full price of a lottery ticket. For example, if a customer pays 58 cents for a
fractional lottery ticket where the full price of a lottery ticket is a dollar, the customer would
receive fifty-eight percent of the prize amount if the ticket is a winner. As used herein, the
term "lottery tickets", or equivalents thereof includes fractional lottery tickets.

- FIG. 1 shows an overall system block diagram of a preferred embodiment of the present invention. In this embodiment, a POS controller 20 is linked to at least one POS terminal 30 via a POS network 40. Four POS terminals 30 are depicted in FIG. 1, but any number of
- 5 POS terminals 30 can be used. The POS network 40 does not have to be a hard wired network, it can include any of a wide variety of means suitable to transmit and receive data communications, as described below. A lottery ticket transaction can be initiated from any one of the POS terminals 30. The information required to initiate a lottery ticket transaction is passed between the POS terminal 30 and the POS controller 20 via the POS network 40.
- 10 It is understood that other types of information can also be passed between the POS terminal 30 and the POS controller 20. For example, merchandise prices, coupon discounts, and sales event information can also be passed between the POS terminal 30 and the POS controller 20.
- 15 As illustrated in FIG 1., the POS controller 20 is also linked to a lottery data processing system 60, discussed in detail below, via a data network 50. The data network 50 can be any one or more of a variety of networks capable of data communications. For example, the data network 50 can be a public switched telephone network 76 (PSTN), an integrated service digital network (ISDN), a packet switched network, a private data communication
- 20 network, a wireless network or any other suitable network.

The POS terminals 30 and the POS controller 20 depicted in FIG. 1 may be embodied in hardware specifically provided to implement the present invention. Alternatively, they may be implemented using existing cash registers and central in-store servers. In particular,

many retail stores have computerized cash registers which are coupled to an in-store transaction processor to receive and transmit merchandise price and other merchandise information. The hardware of these systems may be used for the present invention. To incorporate the present invention changes to the existing in-store transaction processor or
5 store network server may be accomplished in various ways, such as reprogramming the existing in-store transaction processor or by adding an additional file server.

FIG. 2 is a block diagram of the POS controller 20. The POS controller 20 includes a CPU 21 which performs the processing functions. POS controller 20 also includes a read only memory 22 (ROM) and a random access memory 23 (RAM). The ROM 22 is used to store
10 at least some of the program instructions that are to be executed by the CPU 21, such as portions of the operating system or basic input-output system (BIOS), and the RAM 23 is used for temporary storage of data. A clock circuit 24 provides a clock signal which is required by the CPU 21.

15 The POS controller 20 also includes a communication port 25 connected to a data network interface 71 and a POS network interface 72. The communication port 25 enables the CPU 21 to communicate with devices external to the POS controller 20. In particular, the communication port 25 permits communication with the POS terminals 30 and also with the lottery data processing system 60. While a modem (not shown) and a dedicated telephone
20 line for establishing communication with the lottery data processing system 60 is preferred, other data network interfaces, including an ISDN terminal to interface with an ISDN network, a radio communications interface, and an Internet interface, may be used as well.

The CPU 21 can also store information to, and read information from, a data storage device 26. The data storage device 26 includes a local lottery ticket database 26a and other databases including a local sales database 26b that a store may conventionally maintain. The local lottery ticket database 26a is described below. In addition, the data storage device 5 26 includes instructions which can be read by and executed by the CPU 21, thereby enabling the CPU 21 to process transactions. While FIG. 2 depicts separate databases, a single database that incorporates both functions can also be used. Additional databases may be added as needed to store a variety of other information that may be required for other purposes.

10

FIG. 5 is a pictorial representation depicting the preferred layout and the information stored in the local lottery ticket database 26a. The local lottery ticket database 26a includes a date field F1, a sales receipt number field F2, a number of tickets purchased field F3, a sale amount field F4, and a lottery ticket number field F5. In the case of a fractional lottery 15 ticket, the sale amount field F4 would contain the fractional amount of the lottery ticket purchased by the customer (e.g., sixty-eight cents).

While only three records R1 for three lottery ticket transactions are depicted in FIG. 5, any number of records may be stored. To conserve storage space on the data storage device 26, 20 records may be transferred to a different storage device or deleted after some predetermined time interval or after a predetermined event (e.g. after the winning lottery number drawing).

FIG. 3 is a block diagram of the preferred POS terminal 30, which can be located at a supermarket, grocery store, liquor store or any other location where consumer transactions

are performed. As previously discussed above, there can be any number of POS terminals 30 linked to one POS controller 20. The POS terminal 30 includes a CPU 31, ROM 32, RAM 33, clock circuit 34, communication port 35 and a data storage device 36. The communication port 35 interfaces with the POS network 40 which facilitates

5 communication between the POS terminal 30 and the POS controller 20.

The POS terminal 30 includes an input device 37 to receive input from an operator. Any one of a variety of input devices would be suitable for this purpose, including, for example, depression-actuated buttons, keys, membranes, a mouse, touchscreens, bar code scanners,

10 and the like. The input device 37 may interface directly with the CPU 31, as shown in FIG. 3. Alternatively, an appropriate interface circuit may be placed between the CPU 31 and the input device 37.

The POS terminal 30 also includes a display device 38 for conveying information to the operator, customer or both. Any one or a variety of display devices would be suitable for

15 this purpose, including, for example a CRT, LCD, LED or thin film transistor panel.

The POS terminal 30 also includes a data storage device 36, in which transaction processor instructions are stored. These instructions can be read by and executed by the CPU 31, enabling the POS terminal 30 to process a variety of transaction types. By way of example,

20 these transaction types may include "quick-pick" lottery tickets, lottery tickets other than "quick-pick" tickets and merchandise transactions.

The POS terminal 30 further includes a printer 39 for recording the transaction performed by the POS terminal 30. The printer 39 may interface directly with the CPU 31, as shown in

FIG. 3. Alternatively, an appropriate interface circuit may be placed between the CPU 31 and the printer 39.

It will also be understood that other combinations of POS controllers 20 and POS terminals 30 could be employed, depending upon the requirements of a particular establishment. In particular, the POS terminal 30 may incorporate some of features of the POS controller 20 so that the integrated POS terminal/controller can function as a stand-alone unit. This type of terminal would be advantageous for establishments that only require a single POS terminal.

10

Shown in FIG. 4 is a block diagram of the lottery data processing system 60. Like the POS controller 20 described above, the lottery data processing system 60 includes a CPU 61, ROM 62, RAM 63, a clock circuit 64, and a communication port 65. The communication port 65 is connected to the data network interface 71. The data network interface 71 depicted is equivalent to the data network interface in FIG. 2. One POS controller 20 is depicted in FIG. 1, but any number of POS controllers 20 can be linked to the lottery data processing system 60 via the data network 50 and the data network interface 71.

As shown in FIG. 4, the communication port 65 is also connected to an IVRU interface 74. A customer assistance IVRU 75, as shown in FIG. 1, is linked to the lottery data processing system 60 via the IVRU interface 74. The customer assistance IVRU 75 is also connected to the PSTN 76, the public switched telephone network. The customer assistance IVRU 75 allows a caller (not shown) to communicate with the lottery data processing system 60 using a telephone (not shown). Voice command prompts guide the caller through various menu

options allowing the caller to input and extract data related to a particular lottery ticket transaction. This process is described in greater detail below.

The CPU 61 can also store information to, and read information from the data storage
5 device 68. The data storage device 68 includes a lottery ticket database 68a, a POS
controller database 68b, and a winning lottery ticket number database 68c which are
described below. In addition, the data storage device 68 includes instructions which can be
read by and executed by the CPU 61, thereby enabling the CPU 61 to process lottery
transactions. While FIG. 4 depicts separate databases, a single database that incorporates all
10 the functions of databases 68a, 68b and 68c can also be used. Additional databases may be
added as needed to store a variety of other information that may be useful in maintaining
and administering a lottery system.

The lottery data processing system 60 also includes a random number generator 66 and a
15 cryptographic processor 67. When requested by the CPU 61, the random number generator
66 generates the random "quick-pick" numbers used for "quick-pick" lottery ticket
transactions. The cryptographic processor 67 is used to encrypt an authentication code
generated by the CPU 61, described in greater detail below. This encrypted authentication
code is passed to the CPU 61 which associates it with a particular lottery transaction. The
20 cryptographic processor 67 is also used to decrypt encrypted authentication codes which are
passed to it by the CPU 61.

While the illustrated embodiment depicts the random number generator 66 and the
cryptographic processor 67 as separate elements within the lottery data processing system

60, it should be understood that other methods of performing their functions may be used. For example, these functions may be implemented in a computer program stored in the data storage device 68 and executed by the CPU 61.

5 FIG. 6 is a pictorial representation of the information stored in the lottery ticket database 68a. The lottery ticket database 68a includes a POS controller ID number field F6, a date field F7, a number of tickets purchased field F8, a sales receipt number field F9, a sale amount field F10, a lottery ticket numbers field F11, and a cryptographic code field F12. In the case of a fractional lottery ticket, the sale amount field F10 would contain the fractional
10 amount of the lottery ticket purchased by the customer (e.g., sixty-eight cents). The POS controller ID number field F6 is a unique code corresponding to each POS controller 20 that communicates with the lottery data processing system 60. The sales receipt number field F9 stores a serial number related to each receipt generated by the POS terminals 30. The cryptographic code field F12 stores the encrypted authentication code, as discussed in detail
15 below.

While record R2 for one POS controller with ID number 23456 is depicted in FIG. 6, any number of records may be stored. As is also the case with the data storage device 26, from time to time records may be transferred to a different storage device or deleted to conserve
20 storage space within the data storage device 68. The winning lottery ticket number database 68c is of the other databases that the lottery data processing system conventionally maintains.

FIG. 7 is a pictorial representation depicting the information stored in the POS controller database 68b. The POS controller database 68b includes a POS controller ID number field F13, a POS controller name field F14, a POS controller location field F15, and a telephone number field F16. The POS controller name field F14 stores the name of the store or
5 establishment where the POS controller 20 is located. The POS controller location field F15 stores the address of where the POS controller 20 is located. The telephone number field F16 stores the telephone number associated with each POS controller 20. A record R3 for one POS controller location is depicted in FIG. 7, but any number of records may be stored.

10 It should be understood that some fields within the databases discussed above would contain the same corresponding information (e.g. POS controller ID number field F6 in the lottery ticket database 68A corresponds to field F13 in the POS controller database 68B).

FIG. 8 is a flow chart depicting an exemplary lottery ticket transaction process performed at
15 the POS terminal 30 from the customer's point of view. The process starts when a customer indicates to the POS terminal operator that he or she wishes to purchase one or more "quick-pick" lottery tickets in step S1. Of course, the "quick-pick" lottery tickets can be either full or fractional lottery tickets. The customer may make this decision to buy lottery tickets as a stand-alone transaction or while purchasing other merchandise, such as milk or bread. In
20 step S2, the POS terminal operator initiates a lottery transaction by actuating a pre-programmed designation on the input device 37 associated with the POS terminal 30. The customer is then prompted by the POS operator for the number of "quick-pick" lottery tickets desired in step S3.

The number of "quick-pick" lottery tickets may also include fractional lottery tickets. This is convenient for customers who do not want to receive a handful of coins as change from a transaction. For example, a customer due sixty-eight cents in change, from a merchandise purchase could elect to buy a lottery ticket for sixty-eight cents which is worth 68% of a \$1 ticket and which pays-out sixty-eight percent of the \$1 payout. Alternatively, the customer could buy a 34% value of a \$2 ticket with 68 cents. Along with the fractional value lottery tickets, the customer may or course purchase full value lottery tickets.

In an alternative embodiment, the customer may also be prompted for additional lottery ticket information, such as the type of lottery game to be played and the particular lottery numbers selected by the customer. For example, a particular lottery system may offer lottery games based on three, four and six number combinations. The customer may also personally select the lottery numbers to be played.

In step S4, the POS terminal operator enters the number of lottery tickets requested by the customer into the POS terminal 30 via the input device 37. The customer pays for the lottery tickets and any other purchases made at this time in step S5. In step S6, the POS terminal prints a single receipt containing the lottery ticket information and any other merchandise sales information.

20

Shown in FIG. 9 is an example of a store sales receipt 80 according to the one embodiment of the present invention. The store sales receipt 80 includes non-lottery ticket related merchandise information 81. The bottom portion contains lottery ticket information including a plurality of lottery numbers 82, a store ID number 83, a receipt number 84, a

date 85, a time 86, a price 89, a lottery telephone number 87, and an encrypted authentication code 88. In the case of a fractional lottery ticket, the store sales receipt 80 would also include an indication of the fraction of the full price lottery ticket purchased (e.g., as shown in FIG. 9, \$0.68 was paid for ticket 4).

5

FIG. 10 is a flow chart of an exemplary operation of the POS controller 20. The steps of the process shown in FIG. 10 may be implemented in a computer program that may be installed at the POS controller 20 from a computer readable medium and then stored therein in one or more of the ROM 22, the RAM 23 and the data storage device 26 (shown in FIG. 2). The

10 POS controller 20 receives in step S7 a lottery ticket transaction request which includes, in this example, the number of "quick-pick" lottery tickets requested by the customer from the POS terminal 30. The POS controller 20 temporarily stores this information in RAM 23, while it establishes a real-time communication link with the lottery data processing system 60 via the data network 50.

15

While one lottery data processing system 60 is depicted in FIG. 1, additional lottery data processing systems may be available as secondary or back-up lottery data processing systems. Accordingly, if the POS controller 20 fails to establish communication with the primary lottery data processing system, communication attempts would be made to a

20 secondary lottery data processing system.

Once the real-time communication link is established, the POS controller 20 in step S8 transmits the number of "quick-pick" lottery tickets requested to the lottery data processing system 60. The POS controller 20 also transmits its POS controller identification number

(e.g. F1 in FIG. 7). In step S9, the POS controller 20 receives one or more groups of lottery numbers (corresponding to the number of lottery tickets requested) and an associated encrypted authentication code from the lottery data processing system 60. A new record (e.g. R1 in FIG. 5) is created in the local lottery ticket database (26a in FIG. 2) in step S10.

5 In step S11, the POS controller 20 stores in the newly created record the date, receipt number, time, and lottery numbers received from the lottery data processing system (as shown in FIG. 5, F1-F5). The POS controller 20 then transmits the lottery ticket information (i.e. the lottery numbers and the encrypted authentication code) to the POS terminal 30 that initiated the lottery transaction request in step S12.

10

Each of the steps S7-S12 described above is executed by the CPU 21 which is executing computer program instructions stored in the data storage device 26. The communication with the POS terminal 30 takes place via the communication port 25 and the POS network interface 72. The communication with the lottery data processing system 60 takes place via

15 the communication port 25 and the data network interface 71.

In an alternative embodiment, the POS controller 20 may also handle non-"quick-pick" lottery ticket transactions. Customer-selected lottery numbers would be received from the customer via mark-sense slips or coded chits at the POS terminal 30 and sent to the lottery

20 data processing system 60 for processing, as described below.

FIG. 11 is a flow chart of the operation of the lottery data processing system 60. The steps of this process may be stored on a computer readable medium which in this case would be the data storage device 68 (shown in FIG. 4). Upon receiving the lottery ticket transaction

request and the POS controller identification number from the POS controller 20, the lottery data processing system 60 in step S13 accesses the POS controller database 68b (shown in FIGS. 4 and 7). The lottery data processing system 60 searches the POS controller database 68b and authenticates the POS controller identification number, as shown in step S14. In
5 step S15, the lottery ticket database 68a (shown in FIGS. 4 and 6) is accessed and a new lottery transaction entry is added in the appropriate POS controller record (e.g. R2 in FIG. 6).

In step S16, the lottery data processing system 60 generates one or more groups of random
10 "quick-pick" lottery numbers using the random number generator 66 (shown in FIG. 4). These random "quick-pick" lottery numbers are used for the quick-pick lottery tickets. The lottery transaction entry added in step S15 is then updated in step S16 by storing these random "quick-pick" lottery numbers in the designated field of the record.

15 The lottery data processing system 60 also generates an authentication code based on the variables of the particular lottery transaction in step S17. This authentication code is a numeric string including all the data of one record in the lottery ticket database 68a. An example of such a code corresponding to the first entry shown in FIG. 6, R2, is as follows:

20 23456/011597004/3343004/011020112131

In this example, 23456 represents the POS controller ID number; 011597 represents the date; 004 represents the number of tickets purchased; 3343 represents the sales receipt

number; 004 represents the sales amount; and 011020112131 represents the lottery ticket numbers.

While the use of an encrypted authentication code is the preferred embodiment, it should
5 also be understood that the store sales receipt number along with the date for each transaction may be used instead. In this situation, the sales receipt number and the date would be used as a pointer to the lottery ticket database 68a. This pointer would be used to extract and verify lottery ticket information as required.

10 In step S18, using the cryptographic processor 67 (shown in FIG. 4), the authentication code is encrypted to produce a unique numeric code. The lottery transaction entry added in step S15 is then updated again by storing the encrypted authentication code in the appropriate field of the record (see FIG. 6). The use of cryptographic processors and encryption algorithms are well known to those skilled in the art of cryptography. For reference, one of
15 ordinary skill in the art may refer to Bruce Schneier, Applied Cryptography, Protocols, Algorithms and Source Code Inc., (2nd Edition, John Wiley & Sons, Inc., 1996).

The lottery data processing system 60 then transmits the lottery ticket numbers and the encrypted authentication code to the POS controller 20 initiating the lottery ticket
20 transaction in step S19.

This authentication code provides an added level of security and protection for the purchase of the lottery ticket. Should the database within the lottery data processing system 60 be

corrupted, all the information printed on the store receipt lottery ticket can still be verified by any other device capable of decrypting the authentication code.

Each of the steps S13-S19 described above is executed by the CPU 61, which carries out
5 these steps by executing computer program instructions stored in the data storage device 68. The communication with the POS controller 20 takes place via the communication port 65 and the data network interface 71.

In an alternative embodiment, additional information may be transmitted from the POS controller 20 to the lottery data processing system 60. This could include, as described
10 above, customer-selected lottery numbers instead of the random "quick-pick" lottery numbers generated by the lottery data processing system 60. In this situation, the lottery data processing system 60 would store the customer-selected lottery numbers in the lottery ticket database 68a. An encrypted authentication code would be generated accordingly based on the customer-selected lottery numbers. The lottery data processing system 60
15 would then send the encrypted authentication code and authorization to complete the lottery transaction to the POS controller 20.

FIG. 12 is a flow chart depicting the telephone authentication process. The process starts when a customer dials the telephone number 87 printed on the sales receipt 80, as shown in
20 FIG. 9, in step S20. By dialing the telephone number 87, the customer is connected to the customer assistance IVRU 75, as shown in FIG. 1. This unit, via pre-recorded voice messages, prompts the customer to enter the encrypted authentication code 88 printed on the sales receipt 80 using the keys on the telephone in step S21. In step S22, the customer

assistance IVRU 75 communicates this information to the lottery data processing system 60 via the IVRU interface 74, shown in FIG. 4.

In step S23, the lottery data processing system 60 searches the cryptographic code field F12 in the lottery ticket database 68a to find an entry that matches the information provided from the IVRU 75. If no match is found, the lottery data processing system 60 communicates to the IVRU 75 that the encrypted authentication code provided by the customer is not valid. The IVRU 75 then prompts the customer to re-enter the encrypted authentication code. After a predetermined number of failed attempts to correctly enter a valid code, the call is terminated, as shown in step S24.

If a matching entry is found, the lottery data processing system 60 decrypts the encrypted authentication code. The decrypted information is then communicated to the customer assistance IVRU 75 in step S25. Based on this information, the customer assistance IVRU 75 transmits a voice message to the customer providing all the decrypted information (i.e. lottery ticket number, time and date of purchase, etc.). The customer assistance IVRU 75 creates the voice message by combining pre-recorded voice messages stored therein.

A winning lottery ticket may be redeemed at one of the POS terminals 30 or at any conventional lottery terminal. To redeem the winning lottery ticket at one of the POS terminals 30, the POS terminal operator initiates a lottery ticket verification process by actuating a pre-programmed input designator via input device 37 associated with the POS terminal 30. The POS operator then enters the encrypted authentication code printed on the lottery ticket into the POS terminal 30 via the input device 37. This information is

transmitted to the lottery data processing system 60 via the POS controller 20. The lottery data processing system 60 decrypts this information and accesses the lottery ticket database 68a and the winning lottery ticket number database 68b. The lottery data processing system 60 then determines whether the lottery ticket is a winning lottery ticket based on the
5 information contained in the respective databases.

This determination (along with other information as needed) is then communicated back to the POS terminal 30 via the POS controller 20. Other types of information that may be included in this communication are, for example, the winning prize amount, the fractional
10 prize amount, and whether or not there was a jackpot winning ticket.

In an alternative embodiment, the random "quick-pick" lottery numbers used for a lottery ticket transaction may be generated by the POS controller 20. These lottery numbers would then be transmitted to the lottery data processing system 60 as described above.

15 There are thus provided new and improved systems and methods for selling lottery tickets at point-of-sale locations in stores. The invention uses the same equipment provided for processing conventional store sales of merchandise and/or services to process lottery ticket sales.

20 The dual utility of the sales equipment makes the invention cost-effective for merchants. The systems and methods provided permit speedy and efficient purchasing of lottery tickets while making routine purchases of other goods, thus encouraging impulse purchasing of lottery tickets without delaying the regular flow of the point-of-sale checkout line. Further,

the invention enables the quick and efficient sale of fractional lottery tickets with what would otherwise be customer change, again encouraging impulse purchases, thereby increasing the market for lottery tickets.

- 5 The present invention further provides systems and methods whereby an easy to print, easy to read, sales receipt is printed containing both the sales of goods/services and lottery ticket information. The ticket includes authenticating information, including at least one authenticating code and a customer service telephone number, which the customer can use to verify his lottery numbers with the lottery authority.

10

- While the present invention has been described above in terms of specific embodiments, it is to be understood that the invention is not intended to be confined or limited to the embodiments disclosed herein. On the contrary, the present invention is intended to cover all methods, structures and modifications thereof included within the spirit and scope of the
- 15 appended claims.

- As used herein, an "upsell" is a product (good or service) which is offered along with a purchase and has a value approximately equal to a predetermined upsell price. Types of upsells which are described in detail herein include (i) an upgrade from a first product to a
- 20 second product different from the first product, (ii) an additional product, (iii) a voucher which is redeemable for a product or a discount thereon, and (iv) an entry in a sweepstakes, contest, lottery or other game. Various other types of upsells may be used without departing from the scope and spirit of the present invention.

By offering an upsell in exchange for the customer's change, an average of approximately fifty cents additional revenue is collected per upsell, and the number of coins exchanged is reduced or eliminated. The reduction or elimination of change dispensing and collecting greatly reduces the time a customer spends at a POS terminal. In some cases, it
5 may even be possible to reduce the number of cashiers, if any, who operate POS terminals. In addition, customers may recognize a greater value from the transaction while reducing or eliminating the need to carry additional change after a purchase.

Further, the present invention allows businesses to more effectively sell aged or perishable products by offering such products in exchange for change due. Such
10 products, such as aging magazines, audio tapes, compact discs, flowers and various perishables can be sold, thereby generating additional revenue and reducing the costs of otherwise disposing of the products. Providing the customer with aged products effectively allows businesses to "pre-qualify" customers to receive discounts on products.

Referring to FIG. 13A, a POS terminal 1010 includes a POS processor 1012
15 connected to each of an input device 1014, a printer 1016 and a display device 1018. The POS processor 1012 comprises at least one microprocessor 1020, such as an Intel 80386 microprocessor, which is connected to a storage device 1022, such as a RAM, floppy disk, hard disk or combination thereof.

The microprocessor 1020 and the storage device 1022 may each be (i)
20 located entirely within a cash register, vending machine or similar enclosure; (ii) connected thereto by a remote communication link, such as a serial port cable, telephone line or radio frequency transceiver; or (iii) a combination thereof. For example, the POS processor 1012 may comprise one or more cash registers connected to a remote server computer for maintaining databases, or a vending machine connected to a local computer. Many types of

conventional cash registers and other types of POS terminals may be used to implement the present invention in light of the present disclosure. Such terminals may only require software upgrades, which are typically performed without undue effort.

FIG. 13B illustrates another embodiment of the POS terminal 1010 in which
5 a first device 1032 communicates with a second device 1034 via a remote communication link 1036. The first device 1032, which may be a cash register, comprises the input device 1014, the display device 1018 and a microprocessor 1037 which performs some of the functions of the microprocessor 1020 of FIG. 13A. The second device 1034 may be, for example, a processing system operated by an electronic marketing service or credit card
10 clearinghouse. The second device 1034 comprises the storage device 1022, the printer 1016 and a microprocessor 1038 which performs some of the functions of the microprocessor 1020 of FIG. 13A.

Referring again to FIG. 13A, the input device 1014 is preferably a keypad for transmitting input signals, such as signals indicative of a purchase, to the microprocessor
15 1020. The printer 1016 is for registering indicia on a portion of a roll of paper or other material, thereby printing receipts, coupons and vouchers as commanded by the microprocessor 1020. The display device 1018 is preferably a video monitor for displaying at least alphanumeric characters to the customer and/or cashier. Many types of input devices, printers and display devices are known to those skilled in the art, and thus need not
20 be described in detail herein.

The storage device 1022 stores a POS program 1024 for controlling the microprocessor 1020 in accordance with the present invention, and particularly in accordance with the processes described in detail hereinafter. The POS program 1024 also includes necessary program elements, such as "device drivers" for interfacing with each of

the input device 1014, printer 1016 and display device 1018. Appropriate device drivers and other necessary program elements are known to those skilled in the art, and need not be described in detail herein.

The storage device 1022 also stores a required payment amount 1026, which
5 is an amount of money expected to be paid in return for products provided to the customer. From the required payment amount 1026, the microprocessor 1020 may determine, for example, the change due and the total amount of money that should have been collected by the POS terminal 1010 at the end of a day. Those skilled in the art will note that the required payment amount may comprise a single stored value or a plurality of values which
10 each correspond to an amount of money expected to be paid for one or more products.

The storage device 1022 furthermore stores an inventory price database 1028, which includes products and corresponding product prices. The inventory price database 1028 enables the microprocessor 1020 to calculate a total purchase price of one or more products, and in turn store the total purchase price in the required payment amount 1026.

15 An upsell database 1030 stored in the storage device 1022 includes upsells and corresponding upsell prices. An upsell price as used herein is a price, set of prices or range of prices at which it is desirable to sell the corresponding upsell. The upsell price is typically related to the cost of the upsell to the business. For example, if the cost to a restaurant is 20¢ for a small soda, then the upsell price of one additional small soda is a
20 range greater than 20¢, such as the range from 20¢ to 30¢. As another example, if the cost to the restaurant is 22¢ for a large soda, then the cost of an upsell from a small soda to a large soda for the restaurant is the incremental cost $22¢ - 20¢ = 2¢$. Accordingly, the upsell price may possibly be a range having a lower bound of 2¢.

In addition, it is desirable that the upsell price has an upper bound that is less than a predetermined amount. For example, an upsell price should not exceed the price of a product offered as an upsell. Using the example given above, the upsell price for an upgrade from a small soda to a large soda is a range with a lower bound of 2¢. An upper bound for this upsell price should not exceed the cost of a large soda, for example, 90¢. Otherwise, the customer would pay more than the price he would have paid if he had included a large soda in his purchase. Proposing such a transaction to the customer, for example, 95¢ in exchange for a 90¢ large soda, is likely to be ineffective, as well as insulting to the customer.

In general, the price of a product to a customer is different from the cost of the product to the business that offers the product. Therefore, the upsell prices in the upsell database 1030 cannot be ascertained from only the product prices in the inventory price database 1028, but must be calculated so as to yield a profit. For example, the inventory price database 1028 may indicate that the price of a small soda is 55¢ and the price of a large soda is 90¢. From these two prices alone, it is impossible to determine that the cost to a restaurant is 20¢ for a small soda and 22¢ for a large soda, and thus that the cost of such an upsell from small to large soda is 2¢. Accordingly, it is impossible to determine, from the inventory price database 1028 alone, that it would be profitable for the restaurant to profitably provide the upsell for relatively small upsell prices, such as 5¢ or 10¢. Such a profit point can only be determined as a function of the costs.

The above-described difference between the prices of products to customers and the costs of the products to the business permits the POS terminal to determine upsells which (i) are profitably sold for the change due to a customer, and also (ii) provide the customer with a product at a reduced price, in exchange for his change. Providing the product at a reduced price tends to increase customer satisfaction, generate additional

revenue for the business and increase inventory turnover. At the same time, the prices of products need not be reduced, and thus the profits from sales of these products (besides upsells) remain substantially or completely unaffected by offering upsells.

One type of upsell, which several kinds of businesses may offer, is an
5 upgrade from a first product to a second product. Accordingly, a combination of (i) a purchase including a first product, and (ii) an upsell including an upgrade from a first product to a second product would effectively result in the upgrade from the first product to the second product. A restaurant, for example, may offer an upsell comprising an upgrade from a small soda to a large soda, or an upgrade from a plain taco to a deluxe taco. An
10 electronics store may offer an upsell that extends the effective term of a warranty.

Another type of upsell is an additional product to supplement the customer's purchase. For example, a restaurant may offer an upsell comprising a promotional cup or a dessert; a video store may offer an upsell comprising a movie rental ticket, additional videotape or promotional hat; a vending machine may offer an upsell that provides an extra
15 candy bar; an appliance store may offer an upsell comprising a warranty; and a supermarket may offer an upsell comprising any one item from a bin of perishable goods. Such a supermarket upsell is particularly advantageous in generating revenue and liquidating perishable products.

FIG. 14 illustrates a method 1040 for determining an upsell of a purchase at a
20 POS terminal. The POS terminal of this embodiment, for example the POS terminal 1010, maintains a database of upsell prices and corresponding upsells (step 1042). The POS terminal furthermore generates a purchase price of a purchase (step 1044), and sets the required payment amount 1026 (FIG. 13A) to be equal to the purchase price (step 1046). The step of generating a purchase price may comprise, for example, (i) pressing keys on the

input device 1014 (FIG. 13A) which each correspond to a product, (ii) pressing numeric keys on the input device 1014 which correspond to the digits of the purchase price, or (iii) receiving digital signals indicative of a currency value from a remote computing device.

The POS terminal then generates a "rounded" price (step 1048), and

5 calculates a round-up amount (step 1050) equal to the difference between the purchase price and the rounded price. The rounded price may be calculated as, for example, the smallest whole number dollar amount that is greater than the purchase price, the smallest multiple of five dollar amount that is greater than the purchase price, or the amount of money tendered by the customer, which may or may not be a whole number amount. When the rounded

10 price is a whole number, the customer can easily tender bills and in turn receive, at his discretion, either (i) no change, or (ii) change which consists solely of bills, not coins.

When the rounded price is a multiple of large coins, such as nickels, dimes, quarters or half dollars, the customer can receive change that consists solely of coins the customer desires, such as quarters. Many other forms of rounded prices may be calculated in accordance with

15 the present invention.

The POS terminal then determines at least one upsell to be exchanged for the round-up amount (change due). Preferably, to identify the upsell, the POS terminal compares the round-up amount with at least one of the upsell prices in the upsell database (step 1052) to identify at least one upsell having an upsell price including the round-up

20 amount. If the round-up amount corresponds to an upsell price (step 1054), the POS terminal identifies an upsell (step 1056) which corresponds to that upsell price, thereby identifying the upsell to exchange. The POS terminal then outputs signals indicative of the identified upsell (step 1058), such as displaying text and/or graphics that explain to the

customer and/or the cashier that the identified upsell may be purchased for the round-up amount.

The customer indicates to the cashier whether he accepts or rejects the offered upsell. The cashier then presses a button on the POS terminal or otherwise generates a
5 selection signal for indicating selection between the identified upsell and change (step 1060). If the selection signal indicates selection of the upsell, the required payment amount is set to be equal to the rounded price (step 1062). Thus, the customer tenders cash, a check or a credit card to satisfy the amount of money expected to be paid, and receives the upsell in exchange for the round-up amount.

10 As discussed above, those skilled in the art will realize that the required payment amount may comprise a single stored value or a plurality of values which each correspond to an amount of money expected to be paid for one or more products. For example, the step 1062 of setting the required payment amount to be equal to the rounded price may comprise (i) setting a stored unitary value to be equal to the rounded price; or (ii)
15 setting a first stored value to be equal to the purchase price and setting a second stored value to be equal to the round-up amount, similar to the case where two purchases are recorded.

In the example illustrated in FIG. 15, a customer at a fast-food restaurant orders a purchase that includes a hamburger and a small soda. A cashier records the purchase at a POS terminal, and the POS terminal in turn determines the product prices of
20 each of the hamburger and the small soda from entries 1070 and 1072 in the inventory price database 1028. The POS terminal generates therefrom the purchase price \$1.62, and sets the required payment amount 1026 to be \$1.62.

The POS terminal then generates a "rounded" price of \$2.00 (using, in this example, "2" as the smallest whole number which is greater than the purchase price), and

calculates a round-up amount 1074 of $\$2.00 - \$1.62 = 38\text{¢}$. Since the rounded price is a whole number, the customer may easily tender bills and receive either no change or change which consists solely of bills, not coins.

The POS terminal compares the round-up amount 1074 with at least one of
5 the upsell prices in the upsell database 1030. The round-up amount 74 corresponds to a compared upsell price 1076 (the range from 2¢ to 45¢), and the product sold (small soda) corresponds to the upsell condition 1078, so the POS terminal identifies an upsell 80 in the upsell database 1030 which corresponds to the upsell price 1076. The POS terminal then displays text or graphics that explain to the customer and/or the cashier that the upsell 1080
10 may be purchased for the specified amount of change due (the round-up amount 1074).

The customer indicates to the cashier whether he accepts or rejects the offered upsell. The cashier then presses a button on the POS terminal or otherwise generates a selection signal for indicating selection between the identified upsell 1080 and change. If the selection signal does not indicate selection of change, but instead selection of the upsell
15 1080, the required payment amount 1026 is set to be equal to the rounded price. Thus, the customer receives the upsell (an upgrade from a small soda to a large soda), and there are no coins due.

In some embodiments of the present invention, the POS terminal determines the upsell(s) by identifying at least one upsell in the database that corresponds to the
20 compared upsell price. For example, an upsell comprising a small soda may correspond to an upsell price range of between 2¢ and 20¢ . In other embodiments, the POS terminal determines the upsell(s) by identifying at least one upsell in the database which corresponds to both (i) the compared upsell price, and (ii) at least one "purchase condition".

A purchase condition is a condition in effect when the purchase is processed at the POS terminal. Some types of purchase conditions are the purchase price, time of day, day of the week, season, the identity of a product included in the purchase, the cost of a product included in the purchase, and/or past purchases made by the customer. Other types of purchase conditions may be employed without departing from the spirit and scope of the present invention.

The use of purchase conditions in the present invention allows upsells to be more accurately determined, and in turn increases the likelihood that an upsell will appeal to a customer and be exchanged for change due. For example, at certain times during a day, a customer may have a stronger desire for certain upsells. A meal is a more appealing upsell during dinnertime than during the mid-afternoon, and a video rental is more appealing in the evening than in the morning. Accordingly, consideration of the time of a purchase may allow more appealing upsells to be offered.

In embodiments that employ purchase conditions, upsell prices in the upsell database have a corresponding upsell and at least one corresponding upsell condition to compare with the purchase condition. Furthermore, the POS terminal generates the purchase condition(s) in any of a number of ways. For example, a clock signal can provide the time and/or date, the purchase recorded by the POS terminal can provide the identity of products, and a "frequent shopper card" can provide signals indicative of the customer's identity and past purchases made by the customer.

Referring to FIG. 16, an upsell database 1090, which is one embodiment of the upsell database 1030 of FIG. 13A, includes upsell prices 1092, upsell descriptors 1094 and a plurality of upsell conditions, including the items purchased 1096, whether a customer identifier is required 1098, customer product preferences 1100, the time of day 1102 and

cost 1103 to the business. The entries in the upsell database 1090 may be uniquely identified by upsell codes 1104.

Several types of purchase conditions, which are compared with upsell conditions, may be stored in one or more databases in the storage device 1022 (FIG. 13A).

- 5 For example, FIG. 17 illustrates a customer database 1110, which includes unique customer identifiers 1112, as well as customer-specific information, such as name 1114, address 1116, telephone number 1118 and historical product preferences 1120. The POS terminal 1010 (FIG. 13A) may employ the customer database 1110 to determine various purchase conditions, and offer upsells accordingly as described above. A customer at a POS terminal
- 10 may provide a corresponding customer identifier, and thereby provide his customer-specific information, in any of a number of ways. For example, the customer may type his customer identifier into the POS terminal, or may "swipe" (pass) a frequent-shopper card containing a unique identification code through a card reader at the POS terminal.

- Other types of purchase conditions may be derived from an inventory price
- 15 database. Referring to FIG. 18, an inventory price database 1130, which is one embodiment of the inventory price database 1028 of FIG. 13A, includes products 1132 and corresponding product prices 1134. The inventory price database 130 may also include unique product identifiers 1136, as well as the numbers of such products in stock 1138. It may also be desirable to store the "age" (expiration date or time) 1140 of certain types of
- 20 products, thus allowing older products to be identified and offered as upsells.

For each purchase, the above-described purchase conditions, the round-up amount and whether the upsell was selected may be stored in a database of offered upsells. Such a database of offered upsells could provide information on which upsells were accepted by customers, and under what circumstances the upsells were accepted. Thus,

from this database, the value of upsells to consumers may be determined, and the upsell database can be adjusted accordingly. For example, if consumers rarely accept a certain upsell, the upsell may be eliminated from the database or may be offered in exchange for much smaller amounts of change.

5 FIG. 19 illustrates an embodiment of an offered upsell database 1150 stored in the storage device 1022 (FIG. 13A). The offered upsell database 1150 includes upsells which were offered 152, the corresponding round-up amount 1154 and which upsell, if any, was accepted 1156. Other purchase conditions may be desirable to store in the offered upsell database 1150, such as the date 1158 of the offered upsell, a unique customer
10 identifier 1160, an expiration period 1162 for redeeming the upsell, if any, and the date 1164 the upsell was accepted (redeemed), if any.

 In the embodiments discussed above, the POS terminal identified a single upsell to offer in exchange for a round-up amount. However, the POS terminal 1010 (FIG. 13A) may identify more than one upsell that corresponds to an upsell price. In such an
15 embodiment, the POS terminal 1010 can provide the customer with a selection of possible upsells. The POS terminal 1010 may display all of these upsells simultaneously, or may display the upsells sequentially.

 In embodiments where the upsells are displayed simultaneously, the customer selects from among the displayed upsells. In embodiments where the upsells are
20 displayed sequentially, the customer may reject (fail to select) the first displayed upsell, and the POS terminal 1010 then displays a second upsell. Sequentially-displayed upsells can be sorted according to a sorting criteria, allowing the sequence of displayed upsells to proceed in a desired manner. Thus, a first upsell that is sorted before a second upsell is displayed first. If the first upsell is not selected, the second upsell is then displayed.

The upsells may be sorted according to the profit earned on each upsell. In such an embodiment, the upsell yielding the highest profit to the business is offered first. If the customer rejects the highest profit upsell, other upsells having lower profits may be subsequently-displayed. Thus, even if a customer rejects a first upsell, he may select a

5 subsequent upsell that still provides profit to the seller.

In certain other embodiments of the present invention, the POS terminal provides a second upsell having a higher-value to the customer if a first upsell has been rejected. Such a higher-value upsell may be more likely to be accepted than the first upsell. Such a sequence of increasingly-valuable offers may result in the customer's consistent

10 rejection of the first upsell offer. Accordingly, in another embodiment, the POS terminal generates a random number using any of a number of known methods. The random number may be used to determine (i) whether subsequent upsells are offered at all, or (ii) the relative order in which the upsells of different value will be offered. Thus, customers are unsure of whether a second upsell will be offered and/or what the value of a second upsell may be, so

15 they will not automatically reject the first upsell.

FIG. 20 illustrates a method 1180 in which the customer provides a counter-offer to exchange his change for a second upsell. The POS terminal then determines whether to accept this counter-offer.

As described above, the POS terminal outputs signals indicative of a first

20 (identified) upsell (step 1182). The POS terminal generates a selection signal for indicating selection between the first upsell, change and a second upsell (counter-offer by customer). If the selection signal indicates selection of the first upsell (step 1184), then, as described above, the required payment amount is set equal to the purchase price (step 1186). However, if the selection signal indicates selection of the second upsell (step 1188) (i.e., the

customer counter-offers for the second upsell), a second upsell price corresponding to the second upsell is determined (step 1190) from the upsell database. If the calculated round-up amount corresponds to the second upsell price (step 1192) (i.e., the customer's change is sufficient for the second upsell), the required payment amount is set to be equal to the

5 rounded price (step 1186), and the second upsell is thereby accepted.

Besides product upgrades and additional products, another type of upsell is a voucher that is redeemable for a product or a discount thereon. Vouchers can be especially valuable to a seller because they attract customers back to a business and possibly provide repeat sales. A customer is typically more likely to return to a business to use a purchased

10 voucher (i.e. purchased with his change) than to use a free voucher. Vouchers provide further value to the seller through the possibility of breakage (i.e. loss and thus non-redemption of a purchased voucher).

A voucher may either be related to the round-up amount or independent thereof. For example, one type of voucher is a coupon redeemable for a discount on a future

15 purchase, in which the discount amount is equal to the round-up amount of the present purchase. In contrast, another type of voucher is a coupon redeemable for a certain product, regardless of the round-up amount of the present purchase.

Upon accepting the upsell, either the cashier presents a pre-printed coupon to the customer, or the POS terminal prints one for the customer. Printed vouchers may be

20 registered with many different types of indicia, such as redemption information, a unique identifier, the date of the purchase or an expiration date.

In embodiments that include printing a unique identifier on the voucher, the POS terminal maintains a database for storing a plurality of identifiers. When a new voucher must be printed, the POS terminal generates a unique identifier that does not

already exist in the identifier database. This identifier is then stored in the identifier database. By searching the identifier database for a voucher identifier, redemption of the voucher may be tracked and the same voucher cannot be redeemed more times than permissible.

5 Referring to FIG. 21, the storage device 1022 stores an identifier database 200, which includes unique identifiers 1202 for identifying each voucher. The identifier database 1200 may further include voucher face values 1204, which may (or may not) equal the round-up amount exchanged for the voucher. Stored voucher face values allow each voucher to be redeemed for a different value, while minimizing fraud. For example, the
10 voucher face values 1204 stored in the database 1200 may be retrieved upon redemption and compared with values printed on the vouchers. Discrepancies between stored and printed voucher values would indicate forgery of the printed voucher.

Yet another type of upsell is an entry in a game, such as a lottery, contest, sweepstakes or other game. In some embodiments, the prize for winning the game depends
15 on the round-up amount used to purchase the game entry. For example, the prize for winning the game may be proportional to the round-up amount paid for the game entry. In such embodiments, the prize collected upon winning the game is greater for greater round-up amounts. In other embodiments, the probability of winning may be greater for greater round-up amounts. For example, a game entry for which a customer paid \$1.50 may have
20 twice as much of a chance of winning as a game entry for which another customer paid 75¢.

Upon receiving an input indicating selection of the game upsell in exchange for the round-up amount, the POS terminal generates a unique identifier to identify the game entry. The unique identifier and the round-up amount are stored in a game database of identifiers and round-up amounts. When a winning entry is determined, the game database

provides the round-up amount corresponding to the entry, and thereby determines the prize value.

The game database may be, for example, a database maintained by the POS terminal and stored in the storage device 1022 (FIG. 13A). In another embodiment
5 illustrated by FIG. 2210, the game database resides in a lottery data processing system 1220 that is connected to POS terminals 1222 and 1223 through a communication link 1224. Although two POS terminals are shown in FIG. 22 for purposes of clarity, more POS terminals may be connected to the lottery data processing system 1220.

The lottery data processing system 1220 is typically a controller located in a
10 store for controlling lottery ticket transactions performed at POS terminals in the store. The system 1220 thereby serves to collect and store lottery transactions (such as lottery ticket upsells) performed at the store's POS terminals. Such centralized control of lottery transactions allows customers at a number of POS terminals to each receive upsells that permit participation in a single lottery, contest or other game.

15 The lottery data processing system 1220 comprises a microprocessor 1226 for controlling other components described below. The microprocessor 1226 communicates with each of a cryptographic processor 1228 for authenticating lottery transactions and a random number generator 1230 for generating "quick-pick" lottery numbers for each game entry. A storage device 1232 also communicates with the microprocessor 1226, and stores
20 (i) the above-described game database 1234 of identifiers and round-up amounts; (ii) a POS terminal controller database 1236 for maintaining information on POS terminals connected to the lottery data processing system 1220, such as a unique identifier for each terminal and the specific lottery transactions of each terminal; and (iii) a winning lottery ticket number database 1238 for storing winning numbers, and thereby indicating winning entries.

In each of the embodiments of the present invention described above, the customer selects and receives an upsell. However, as described below, the customer may prefer to transfer ("donate") his upsell to a second customer, with the upsell being received by the second customer at his next visit to a POS terminal. The second customer may visit
5 the POS terminal, for example, to pay for products, as described above, or specifically to collect the donated upsell.

FIG. 23 depicts a customer database 1260 which is another embodiment of the customer database 1110 (FIG. 17) stored in the storage device 1022. The customer database 260 includes unique customer identifiers 1262, as well as customer-specific
10 information described above, such as name 1264, address 1266, telephone number 1268 and historical product preferences 1270. In addition, the customer database 1260 includes linked customer identifiers 1272 that identify others (if any) to which the customer's upsells are donated.

For example, using the functionality of the customer database 1260, a
15 customer may specify that an acquaintance receives the customer-earned upsell. The customer database 1260 also includes upsells due 1274 to the customer, such as upsells previously earned or transferred to him by another, as well as upsell expiration dates 1275 indicating the last dates for receiving the upsells due.

Using the exemplary data shown in the database 1260 of FIG. 23, a first
20 customer identifier 1276 of the record 1277 identifies a customer name "Bill Smith" and further identifies a corresponding linked customer through identifier 1278 in field 1272. This linked customer identifier 1278 corresponds to the customer identifier 1280 identifying the customer "Jill Smith". Accordingly, Jill Smith has been identified and receives upsells donated by Bill Smith.

An upsell due 1282 is associated with customer identifier 1280 of record 1281 (Jill Smith). The upsell due 1282 is provided based on a purchase by Bill Smith, and is collected by Jill Smith during a visit to a POS terminal. The upsell identifier "A" in field 1274 may comprise, for example, a small soda. Thus, the use of "linked customers" thus
5 allows customers to transfer earned upsells, or even purchased products, thereby increasing both customer satisfaction and customer retention.

A customer may prefer to randomly donate his upsell to one (or more) of a number of customers, such as a number of family members or a predetermined list of needy families, rather than to any one customer in particular. In such an embodiment, the donating
10 customer may first designate an associated group of linked customer identifiers 1272. Alternatively, the customer may let the store select a group of customers. A random one (or more) of this group is selected by the POS terminal as the recipient of the upsell.

Referring now to Figs. 12a and 12b, a process 1300 is shown whereby automated upsell processing is performed for a customer having a frequent shopper card. A
15 customer who wishes to register for a frequent shopper card which stores his preferences provides personal information (step 1302), such as his name, address and/or telephone number, to a POS operator or other person who responsible for data entry. This personal information is then stored (step 1304) in a record of the customer database. Such records are exemplified in FIG. 23 by the records 1276 and 1281 of the customer database 1260.

20 The customer selects (step 1306) if he would like to normally receive an upsell, rather than change. If he so selects, possible choices of upsells are displayed (step 1308) to the customer. The customer chooses which of the displayed upsells he prefers to normally receive (step 1310), and the chosen upsell is stored (step 1312) in the historical preferences field 1270 of his customer record.

The customer may also choose (step 1314) if he would like to donate his upsells to a "linked" customer having a frequent shopper card. If so, the customer provides information (step 1316) identifying the linked customer, such as the name, address and/or account number of the linked customer. The customer may select multiple other linked
5 customers to receive donated upsells. The information is verified (step 1318) to assure that the second customer may be properly identified from the information provided, and the information is stored in the customer database record. As necessary, additional customer records are created for second and subsequent customer(s).

Possible upsells to donate to the second customer are displayed (step 1320) to
10 the customer. The customer chooses which of the displayed upsells he prefers to normally transfer (step 1322), and the chosen upsell is stored (step 1324) in the customer record. Finally, the customer is issued his frequent shopper card (step 1326) through which the POS terminal may identify his customer record.

Referring to FIG. 25, a method 1340 for applying previously-selected
15 customer preferences to a current visit to a POS terminal begins with a determination (step 1342) of whether a frequent shopper card is being used. Such a determination may be made, for example, by receiving a signal from a card reader, thereby indicating that a card has been "swiped" through the card reader. If a frequent shopper card is not being used, an upsell is determined (step 1344) as previously described, and an upsell (if selected) is provided to the
20 customer (step 1346) in exchange for his change.

If a frequent shopper card is being used, the customer database is searched to determine (step 1348) if the customer has a preferred upsell. If he does, the preferred upsell is selected (step 1350). The customer database is also searched to determine (step 1352) if the customer has established a second customer to receive donated upsells. If so, an

identifier for the selected upsell is stored (step 1354) in an account of the second customer, thereby indicating that the second customer may receive the selected upsell. In other embodiments, the second customer may receive donated products that are not upsells, such as products bought for "list" price.

5 Referring now to FIG. 26, a method 1370 illustrates how the second customer may receive the donated upsell. While at the POS terminal, the second customer swipes his frequent shopper card through a card reader (step 1372), thereby identifying a customer record of the customer database providing information on his preferences and any upsells donated to him. The customer record is searched to determine (step 1374) if an
10 upsell has been donated to the second customer. If not, the second customer completes his transaction (step 1376) at the POS terminal as described above. If an upsell has been donated, the second customer is informed and the upsell is provided (step 1378), thereby clearing the donated upsell from the record of the second customer. A transaction-specific upsell, dependent on the change of the second customer, can be offered in addition to the
15 donated upsell.

As described above, an upsell may have a corresponding expiration date after which the upsell may not be redeemed. For example, a donated upsell may be transferred only if the second customer collects the upsell through the above-described method 1370 (FIG. 26) before a predetermined date. An expiration date for donated upsells is especially
20 advantageous to a store in that it can increase customer retention by providing an incentive to visit the store having the POS terminals before the upsell expires. Breakage also provides the store with profit.

In many of the embodiments presented herein, the methods and apparatus of the present invention have been described in detail with respect to a single device

functioning as a POS terminal, such as a cash register. However, as also described above, the functionality of the present invention may be implemented by a plurality of devices sharing the described functionality, such as the multi-unit system illustrated in FIG. 13B.

Accordingly, FIG. 27 illustrates a method 1390 for determining an upsell at a
5 POS terminal in accordance with the embodiment of FIG. 13B. The method 1390 may be performed, for example, by a combination of a cash register and a processing system operated by an electronic marketing service or credit card clearing house. The cash register generates a purchase price and transmits the purchase price to the processing system (step 1392).

10 The processing system generates a rounded price (step 1394), and generates a round-up amount in dependence thereupon (step 1396). As described above, the processing system identifies an upsell to offer to the customer (step 1398). If the customer selects the upsell (step 1400), then the required payment amount of the cash register is set, manually or automatically through a connection with the processing system to the rounded price (step
15 1402).

It will be understood by those skilled in the art that many different systems may be provided wherein the functionality of the present invention is shared amongst multiple hardware and/or software devices.

Although the present invention has been described with respect to a preferred
20 embodiment thereof, those skilled in the art will understand that various substitutions may be made to those embodiments described herein without departing from the spirit and scope of the present invention. For example, many other types of upsells that are not discussed in detail herein are contemplated by the present invention. One such upsell may comprise "points", such as those redeemable for store credit, telephone calls, Internet access or pay

television events. Furthermore, many types of POS terminals, besides those requiring cashiers, are contemplated by the present invention.

In accordance with the present invention, a business may acquire a lottery ticket, and
5 allocate a portion of the lottery ticket to a customer. A share of any prize that is won with the lottery ticket is provided to the customer, the share of the prize corresponding to the allocated portion of the lottery ticket. For example, if a customer receives a \$0.34 portion of a \$2.00 lottery ticket, then the customer receives 17% ($\$0.34 / \$2.00 = 17\%$) of the prize derived from the lottery ticket. A portion of a lottery ticket may be expressed as a monetary
10 value, such \$0.34, and may be expressed as a percentage, such as 17%.

Typically, the business will acquire a group of lottery tickets and allocate portions of those lottery tickets to customers as needed. The prizes derived from the group of lottery tickets are received by the business, which in turn pays shares of the prizes to customers based on the allocated portions. Since the business need only purchase conventional lottery
15 tickets, the business may facilitate the play of fractional lottery tickets without requiring significant changes in existing lottery agency practices.

The portion of the lottery ticket allocated to the customer may be based on a change amount that is due in connection with a transaction at a POS terminal. Such an embodiment is advantageous since many customers will welcome an alternative to receiving change.
20 Moreover, receiving something having a high perceived value, such as a fractional lottery ticket, instead of change can be even more attractive to customers.

Referring to FIG. 28, a network 2008 comprises a store controller 2010, which is in communication with a lottery server 2012 and with POS terminals 2014, 2016, 2018 and 2020. The POS terminals 2014, 2016, 2018 and 2020, which are typically cash registers or

other terminals, may initiate and/or complete fractional lottery ticket transactions. Although four POS terminals are shown in FIG. 28, any number of POS terminals may be in communication with the store controller 2010. The POS terminals 2014, 2016, 2018 and 2020 may be located in the same store, in different stores of a chain of stores, or in other
5 locations.

The store controller 2010 directs the operation of, stores data from and transmits data to the POS terminals 2014, 2016, 2018 and 2020. The store controller 2010 may itself be a POS terminal or may be another computing device that can communicate with one or more POS terminals. The lottery server 2012 is typically controlled by a state lottery agency, and
10 responds to requests from the store controller 2010. For example, the lottery server 2012 may issue lottery tickets as requested by the store controller 2010, and may provide the winning numbers for a drawing date.

Referring to FIG. 29, the store controller 2010 of FIG. 28 comprises a processor 2022, such as one or more conventional microprocessors. The processor 2022 is in
15 communication with a data storage device 2024, such as an appropriate combination of magnetic, optical and/or semiconductor memory. The processor 2022 and the storage device 2024 may each be (i) located entirely within a single computer or other computing device; (ii) connected to each other by a remote communication link, such as a serial port cable, telephone line or radio frequency transceiver; or (iii) a combination thereof. For
20 example, the store controller 2010 may comprise one or more computers that are connected to a remote server computer for maintaining databases.

The storage device 2024 stores a program 2026 for controlling the processor 2022. The processor 2022 performs instructions of the program 2026, and thereby operates in accordance with the present invention, and particularly in accordance with the methods

described in detail herein. The program 2026 furthermore includes program elements that may be necessary, such as an operating system and "device drivers" for allowing the processor 2022 to interface with computer peripheral devices. Appropriate device drivers and other necessary program elements are known to those skilled in the art, and need not be

5 described in detail herein.

The storage device 2024 also stores (i) a ticket supply database 2030; (ii) a transaction database 2032; (iii) a fractional ticket database 2034; (iv) a winning lottery ticket database 2036; and (v) a frequent shopper database 2038. The databases 2030, 2032, 2034, 2036 and 2038 are described in detail below and depicted with exemplary entries in

10 the accompanying figures. As will be understood by those skilled in the art, the schematic illustrations of and accompanying descriptions of the databases presented herein are exemplary arrangements for stored representations of information. A number of other arrangements may be employed besides the tables shown. Similarly, the illustrated entries represent exemplary information, but those skilled in the art will understand that the number

15 and content of the entries can be different from those illustrated herein.

Referring to FIG. 30, a schematic illustration of a POS terminal 2040 is descriptive of the POS terminals 2014, 2016, 2018 and 2020 of FIG. 28. The POS terminal 2040 comprises a processor 2042, such as one or more conventional microprocessors. The processor 2042 is in communication with a data storage device 2044, such as an appropriate

20 combination of magnetic, optical and/or semiconductor memory. The processor 2042 and the storage device 2044 may each be (i) located entirely within a single computer or other computing device; (ii) connected to each other by a remote communication link, such as a serial port cable, telephone line or radio frequency transceiver; or (iii) a combination

thereof. For example, the POS terminal 2040 may comprise one or more computers which are connected to a remote server computer for maintaining databases.

An input device 2046, a printer 2048 and a display device 2050 are each in communication with the processor 2042. The input device 2046 preferably comprises a keypad for transmitting input signals, such as signals indicative of a purchase, to the processor 2042. The input device 2046 may also comprise an optical bar code scanner for reading bar codes and transmitting signals indicative of those bar codes to the processor 2042. The printer 2048 is for registering indicia on paper or other material, thereby printing fractional lottery tickets as commanded by the processor 2042. The display device 2050 is preferably a video monitor for displaying at least alphanumeric characters to the customer and/or a cashier operating the POS terminal 2040. Many types of input devices, printers and display devices are known to those skilled in the art, and need not be described in detail herein.

The storage device 2044 stores a POS terminal program 2052 for controlling the processor 2042. The processor 2042 performs instructions of the POS terminal program 2052, and thereby operates in accordance with the present invention, and particularly in accordance with the methods described in detail herein. The POS terminal program 2052 furthermore includes program elements that may be necessary, such as an operating system and "device drivers" for allowing the processor 2042 to interface with computer peripheral devices, such as the input device 2046, the printer 2048 and the display device 2050.

Appropriate device drivers and other necessary program elements are known to those skilled in the art, and need not be described in detail herein.

FIG. 31 illustrates an alternate embodiment of a POS terminal 2058, which is descriptive of the POS terminals 2014, 2016, 2018 and 2020 of FIG. 28. A control device

2060 is in communication via a communication medium 2062 with a system 2064 for printing fractional lottery tickets, receipts and/or coupons. The control device 2060 comprises a processor 2066 that is in communication with the input device 2046 (FIG. 30) and the display device 2050 (FIG. 30). The system 2064 for printing comprises a processor 5 2068 in communication with the storage device 2044 (FIG. 30) and the printer 2048 (FIG. 30). In this embodiment, the control device 2060 may be a cash register, and the system 2064 may be an electronic device for printing tickets in accordance with data received from the cash register. Other configurations of the POS terminal 2040 will be understood by those skilled in the art.

10 The description that follows is arranged into the following sections: Allocating Portions of Lottery Tickets, Acquiring Additional Lottery Tickets, and Redeeming Portions of Lottery Tickets.

Allocating Portions of Lottery Tickets

15 Referring to FIG. 32, the ticket supply database 2030 of FIG. 29 includes rows 2080, 2082, 2084, 2086 and 2088, each of which represents an entry of the ticket supply database 2030. Each entry defines a lottery ticket that is to be allocated, in which the allocated portions of the lottery ticket are included in fractional lottery tickets. In particular, each 20 entry includes (i) a ticket identifier 2090 that uniquely identifies the entry, such as a serial number of the lottery ticket or a portion of the serial number; (ii) a drawing date 2092 that indicates when winning ticket numbers will be announced; (iii) ticket numbers 2094; (iv) an unallocated portion 2096 of the lottery ticket; and (v) a ticket price 2098, which indicates the total of the unallocated portion 2096 and any allocated portions. For any entry, the

unallocated portion 2096 and the ticket price 2098 may be used to determine how much of the corresponding lottery ticket has been allocated. For example, referring to the entry 2084, of the \$1.00 ticket price, \$0.23 remains unallocated. Accordingly, \$0.77 (\$1.00 - \$0.23) has been allocated. A total remaining unallocated amount 2100 indicates the sum of

5 the unallocated portions of all lottery tickets. Given the exemplary data shown in FIG. 31, the total remaining unallocated amount 2100 is \$1.54 (\$0.12 + \$0.31 + \$0.23 + \$0.78 + \$0.10 = \$1.54).

Referring to FIG. 33, exemplary data for the ticket supply database 2030 (FIGS. 29 and 32) are shown before and after a portion of a lottery ticket has been allocated. The table

10 2110 represents the ticket supply database 2030 before a transaction represented by a round-up amount 2130. The table 2120 represents the ticket supply database 2030 after the transaction represented by the round-up amount 2130. The round-up amount 2130 has a value of \$0.35, and corresponds to a transaction where a customer exchanges his change due (\$0.35) for a fractional lottery ticket. The customer thus obtains a portion of a lottery ticket,

15 and the portion is based on the monetary amount \$0.35.

As described above, each of the entries shown in the table 2110 corresponds to a ticket. Except for the entry 2135, the monetary amount \$0.35 is greater than the unallocated portions of every entry. By contrast, the entry 2135 has an unallocated portion of \$0.78, and thus a \$0.35 portion of the corresponding lottery ticket may be allocated therefrom.

20 Accordingly, the lottery ticket corresponding to the entry 2135 is selected, and a portion corresponding to \$0.35 is allocated to make a new fractional lottery ticket.

The entry 2135 represents the ticket "1234563" before the \$0.35 portion is allocated therefrom. An entry 2140 of the table 2120 represents the ticket "1234563" after the \$0.35 portion is allocated therefrom. The unallocated portion of the entry 2140 is \$0.43, which is

the original \$0.78 unallocated portion reduced by \$0.35. Similarly, before the transaction represented by the round-up amount 2130, the total remaining unallocated amount (of all lottery tickets) is \$1.54. After the transaction, the total remaining unallocated amount is \$1.19, which is \$1.54 reduced by \$0.35.

- 5 Referring to FIG. 34, the transaction database 2032 of FIG. 29 includes rows 2150, 2152, 2154, 2156 and 2158, each of which represents an entry of the transaction database 2032. Each entry defines a transaction initiated by a POS terminal. In particular, each entry includes (i) a transaction number 2160 that uniquely identifies the transaction; (ii) a POS terminal identifier 2162 that uniquely identifies the POS terminal initiating the transaction;
- 10 (iii) a purchase price 2164; (iv) a rounding multiple 2165 that is used to indicate an amount to which the purchase price is to be rounded; (v) a round-up amount 2166 that is the monetary amount used to purchase the fractional lottery ticket; (vi) an indication of whether the offer for a fractional lottery ticket was accepted 2168; (vii) a frequent shopper number 2170 identifying a customer who has used a frequent shopper card for the transaction; (viii)
- 15 a date 2172 of the transaction; and (ix) a fractional ticket identifier 2174 that identifies a fractional lottery ticket provided in exchange for the round-up amount.

The round-up amount 2166 is the monetary amount used to purchase the fractional lottery ticket. In some embodiments, round-up amount 2166 is equal to the allocated portion of a lottery ticket. For example, a customer may have \$0.62 in change (the round-up

20 amount) from a purchase, and use that change to acquire a \$0.62 portion of a lottery ticket. However, the monetary amount used to purchase the fractional lottery ticket need not be equal to the allocated portion of the corresponding lottery ticket. In certain embodiments, the allocated portion of a lottery ticket is based on a rounded-down (or rounded-up) monetary amount. For example, a customer may have \$0.62 in change from a purchase, and

use that change to acquire a fractional lottery ticket. The fractional lottery ticket may be based on an allocated \$0.60 (\$0.62 rounded down to the nearest nickel) portion of a lottery ticket. Of course, the monetary amount may be rounded down to other multiples, such as to the nearest dime, quarter or dollar, and that rounded amount would define the allocated

5 portion of a lottery ticket. The difference between the change due and the rounded-down amount upon which the fractional lottery ticket is based may, for example, be kept as a service fee by the seller of the fractional lottery ticket.

The allocated portion of a lottery ticket may be based on the monetary amount in still further ways. For example, the allocated portion may be double the monetary amount. It

10 may be advantageous to provide such a double-value allocated portion if a customer buys a predetermined good or type of good, or if the customer uses a frequent shopper card. For example, if a customer has \$0.62 in change and purchases a product of a particular manufacturer, the customer receives a fractional lottery ticket that is based on an allocated \$1.24 (double \$0.62) portion of one or more lottery tickets in exchange for his change.

15 Referring to FIG. 35, tables 2180 and 2190 represent records of the fractional ticket database 2034 (FIG. 29). Typically, the fractional ticket database 2034 includes a plurality of records such as those represented by the table 2180 and 2190. Each record of the fractional ticket database 2034 defines a fractional lottery ticket, and each fractional lottery ticket includes allocated portions of one or more lottery tickets.

20 The record represented by the table 180 defines a fractional lottery ticket that is identified by an identifier 2185 (the identifier "1001"). The table 2180 includes an entry 2187, which defines a portion of a lottery ticket that is included in the fractional lottery ticket "1001". The entry 2187 includes (i) a ticket identifier 2182 that uniquely identifies

the lottery ticket; and (ii) a portion 2184 indicating a portion of the lottery ticket that is included in the fractional lottery ticket "1001".

Similarly, the record represented by the table 2190 defines a fractional lottery ticket that is identified by an identifier 2195 (the identifier "1003"). The table 2190 includes
5 entries 2197 and 2198, which each include (i) a ticket identifier 2192; and (ii) a portion 2194. Since the fractional lottery ticket "1003" includes portions from more than one lottery ticket, the fractional lottery ticket "1003" may include allocated amounts which collectively exceed the maximum price of one lottery ticket.

As described above, a fractional lottery ticket includes portions of one or more
10 lottery tickets. In certain embodiments, the lottery tickets are not chosen by the customer, but are instead chosen automatically by the POS terminal or store controller 2010 (FIG. 28). In such embodiments, a lottery ticket is selected from the plurality of lottery tickets in the ticket supply database 2030 (FIG. 29). The lottery ticket may be selected in several ways. For example, a lottery ticket having an unallocated portion at least as great as the monetary
15 value may be selected. Similarly, a set of lottery tickets that each have an unallocated portion at least as great as the monetary value may be determined. From this set, the lottery ticket which has a minimal unallocated portion is selected. The description below further clarifies this method of selecting a lottery ticket.

Referring to FIG. 36, a table 2200 illustrates exemplary data for the ticket supply
20 database 2030 (FIGS. 29 and 32). The table 2200 includes entries 2202, 2204, 2206 and 2208. A round-up amount 2220 has a value of \$0.60, and corresponds to a transaction where a customer exchanges his change due (\$0.60) for a fractional lottery ticket. The customer thus obtains a portion of a lottery ticket, and the portion is based on the monetary amount \$0.60. To select the lottery ticket from which to allocate a portion, the store

controller 2010 determines a set of tickets that each have an unallocated portion of at least \$0.60. This set includes the entries 2204, 2206 and 2208. From this set, the lottery ticket which has a minimal unallocated portion is selected. Of the entries 2204, 2206 and 2208, the entry 2208 has the minimal unallocated portion (\$0.61). Accordingly, the lottery ticket
5 corresponding to the entry 2208 is selected, and a \$0.60 portion is allocated therefrom.

In other embodiments, the customer may select the ticket numbers himself at the time of the transaction, either manually or through numbers stored on a frequent shopper card. One or more lottery tickets that include those ticket numbers would be acquired (e.g., by electronic request to the lottery server 2012), added to the ticket supply database 2030
10 (FIG. 29), and one or more portions thereof would be included in the fractional lottery ticket purchased by the customer. Such an embodiment allows a customer to obtain a fractional lottery ticket having his favorite or "lucky" numbers.

Once a fractional lottery ticket has been determined, the POS terminal prints for the customer a ticket indicative of the fractional lottery ticket, for example, on a receipt. The
15 printed ticket serves as proof that the customer is entitled to the indicated portions of any prizes won by the indicated lottery tickets. Such a printed ticket may include the corresponding (i) fractional lottery ticket identifier, (ii) ticket numbers, (iii) allocated portion(s) of the lottery ticket(s), (iv) transaction identifier, and (v) an encrypted code based on a combination thereof. Such an encrypted code may be used to verify that the printed
20 ticket is unaltered. Encryption techniques are described in "Applied Cryptography: Protocols, Algorithms and Source Code in C, Second Edition", by Bruce Schneier, published 1996. Those skilled in the art will understand that the encrypted code will be determined by a cryptographic algorithm such that it would be almost impossible for a forger to generate a valid code, much less a code that indicates a winning lottery ticket.

The printed ticket may also include contractual language, such as provisions assigning to the customer the right and title in and to the indicated portions of any prizes won by the indicated lottery tickets. Still further matter such as the drawing date and an expiration date of the fractional lottery ticket may be included on the printed ticket, as will

5 be understood by those skilled in the art. It may be further desirable to print a bar code that indicates any or all of the above information, thereby facilitating entry of the information using a bar code scanner.

Referring to FIG. 37, a method 2240 for allocating portions of lottery tickets initiates by determining a monetary value (step 2242). For example, a POS terminal may calculate

10 an amount of change due and round this amount down to the nearest dime. The POS terminal transmits the rounded amount to the store controller, and the store controller thereby determines the monetary value to be this rounded amount. The store controller in turn allocates a portion of a lottery ticket, the portion being based on the monetary value (step 2244). The store controller then outputs (i) a ticket identifier that identifies the lottery

15 ticket, and (ii) a portion identifier that identifies the allocated portion of the lottery ticket (step 2246). For example, the store controller typically transmits the ticket identifier and the portion identifier to the POS terminal, and the POS terminal in turn prints a fractional lottery ticket based on the transmitted identifiers, as described above. The store controller also stores the ticket identifier and the portion identifier (step 2248), for example, in the

20 fractional ticket database 2034 (FIG. 29), for authentication purposes.

Acquiring Additional Lottery Tickets

As described above, portions of lottery tickets from the supply of lottery tickets are allocated. After an allocation, it is possible that a lottery ticket will have an unallocated portion of \$0.00. In other words, the entire lottery ticket will have been allocated, and no further portions of the lottery ticket remain to be allocated.

- 5 In addition, after an allocation, it is possible that no single lottery ticket has an unallocated portion which is sufficient to satisfy a particular request (or an anticipated request) for a fractional lottery ticket. For example, there may be an attempt to allocate a \$0.35 portion of a lottery ticket, yet no lottery ticket represented in the ticket supply database 2030 (FIG. 29) has an unallocated portion of \$0.35 or more. In such a situation, it
- 10 may be possible to allocate portions from a plurality of lottery tickets, such that the portions collectively equal \$0.35. However, it may be desirable to allocate a portion from a single lottery ticket, rather than from many. For example, it is simpler for a customer to track one set of ticket numbers, rather than a plurality of sets of ticket numbers.

- Accordingly, it is advantageous to acquire additional lottery tickets for the supply of
- 15 lottery tickets. It is particularly advantageous to acquire additional lottery tickets at a time before the lottery tickets are needed, so as not to introduce undue delays into a transaction. Additional tickets may be acquired in predetermined amounts to reduce time spent acquiring lottery tickets. For example, thirty tickets may be acquired at once. In addition, the predetermined amount may depend on criteria such as the number of POS terminals in use.
- 20 Additional lottery tickets may be acquired by purchasing "quick pick" tickets (Tickets with randomly selected ticket numbers) from the state lottery in a known manner.

In one embodiment, the store controller 2010 (FIG. 28) counts the number of tickets that have an unallocated portion that is above a first predetermined threshold. For example, the store controller 2010 may count the number of tickets that have an unallocated portion

that is above \$0.50. This number is compared with a second predetermined threshold, and one or more additional lottery tickets are acquired if this number is below the second predetermined threshold. For example, if there are less than ten lottery tickets having unallocated portions above \$0.50, additional lottery tickets are acquired.

5 In another embodiment, the store controller 2010 (FIG. 28) counts the number of tickets that have an unallocated portion that is above a requested portion. For example, a POS terminal may request a \$0.40 fractional lottery ticket from the store controller. The store controller 2010 then counts the number of tickets that have an unallocated portion that is above \$0.40. This number is compared with a predetermined threshold, and one or more
10 additional lottery tickets are acquired if this number is below the predetermined threshold. For example, if there are less than eight lottery tickets having unallocated portions above \$0.40, additional lottery tickets are acquired.

 In another embodiment, the store controller 2010 (FIG. 28) calculates the sum of the unallocated portions of all tickets. If the sum is below a predetermined threshold, additional
15 tickets are acquired. For example, if the total remaining unallocated amount is below \$10.00, a block of thirty additional tickets are acquired.

Redeeming Portions of Lottery Tickets

20 The business or other entity acquiring and maintaining the supply of lottery tickets may check each to determine whether any are winning tickets. If so, the business preferably redeems the winning tickets for prizes as soon as practical, so that the prizes may be used to pay those customers that have corresponding fractional lottery tickets. Winning ticket numbers may be entered manually into the store controller 2010 (FIG. 28) when available.

Ideally, the store controller 10 will receive from the lottery server 2012 (FIG. 28) the winning ticket numbers for each drawing date. The store controller can store these winning ticket numbers in the winning lottery ticket database 2036 (FIG. 29).

Referring to FIG. 38, the winning lottery ticket database 2036 includes entries 2260, 5 2262 and 2264, each defining winning ticket numbers for a drawing date. Each entry includes (i) a corresponding drawing date 2266, (ii) winning ticket numbers 2268, and (iii) a prize 2270. The winning lottery ticket database 2036 should include entries for all drawing dates corresponding to valid and redeemable fractional lottery tickets. For example, if fractional lottery tickets may be redeemed up to one year after the corresponding drawing 10 date, then the entries for each drawing date of at least the past year should be stored. The prize 2270 may be, for example, the prize won upon matching all winning ticket numbers. More prizes may be specified for each entry. For example, a prize for matching only five of six winning ticket numbers may be specified for each entry as well.

When winning ticket numbers for a drawing date are received by the store controller 15 2010 (FIG. 28), the store controller 2010 may simply store them in the winning lottery ticket database 2036, where they are accessed when fractional lottery tickets are redeemed by customers. However, the store controller 2010 may also determine which fractional lottery tickets include portions of a winning lottery ticket. Then the corresponding records of the fractional ticket database 2034 (FIG. 29) may be modified to indicate that the fractional 20 lottery tickets include portions of winning lottery tickets. In addition, if those fractional lottery tickets were purchased using frequent shopper cards, then the corresponding customer may be notified.

Referring to FIG. 39, the frequent shopper database 2038 includes entries 2280, 2282, 2284 and 2286, each defining a frequent shopper (a customer who has used a frequent

shopper card for the transaction). In particular, each entry includes (i) a frequent shopper number 2288 for uniquely identifying the frequent shopper; (ii) an address 2290 of the frequent shopper; (iii) a telephone number 2292 of the frequent shopper; (iv) a name 2294 of the frequent shopper; and (v) an email address 2296 of the frequent shopper. With such

5 stored information, frequent shoppers may be notified by mail, telephone call, email or other forms of notification as desired. In addition, frequent shoppers may be notified by the POS terminal when they next use their frequent shopper card. Providing frequent shopper with the additional benefit of notification is advantageous because it may prompt customers to become frequent shoppers. Consequently, these customers are more likely to continue

10 frequenting the corresponding business.

To redeem a fractional lottery ticket, a customer preferably provides the printed ticket to show that he is entitled to the indicated share of the prize. The printed ticket is verified to assure that it is valid and unaltered. For example, if the printed ticket is valid, the fractional lottery ticket identifier inscribed on the printed ticket indicates a record in the

15 fractional ticket database. That record should in turn indicate corresponding information on the printed ticket. In addition, the encrypted code can be verified.

Referring to FIG. 40, a method 2300 for redeeming a fractional lottery ticket initiates by receiving (i) a ticket identifier that identifies a lottery ticket, and (ii) a portion identifier that identifies an allocated portion of the lottery ticket (step 2302). Such identifiers may be

20 received by manually entering one or more identifiers into a POS terminal, from which the identifiers are transmitted to the store controller 2010 (FIG. 28). Alternatively, a bar code scanner of the POS terminal may read a bar code on the printed ticket, and transmit the bar code to the store controller 2010. The entered identifier or bar code may be indicative of the fractional lottery ticket identifier, which may be used to retrieve a corresponding ticket

identifier and portion identifier from the fractional ticket database 2034 (FIG. 29). The store controller thus receives the ticket identifier and portion identifier.

Once the identifiers are received, thereby identifying one or more lottery tickets and allocated portions thereof, a prize value of the lottery tickets is determined (step 2304). As
5 discussed above, the prize value may be determined by comparing ticket numbers of a lottery ticket with winning ticket numbers stored in the winning lottery ticket database 2036 (FIG. 29). As also described above, the portion of the prize that is to be provided to the customer is determined by the allocated portion of the lottery ticket. This portion of the prize is provided to the customer (step 2306), typically by providing cash from a cash
10 register or by writing or printing a check made out to the customer.

A winning lottery ticket may have an unallocated portion greater than zero. Such a winning lottery ticket will have an associated portion of the prize value that is not to be paid to customers. This portion of the prize is instead retained by the business, and may be used to finance various customer incentives. For example, a portion of retained prize value may
15 be provided back to customers in the form of fractional lottery tickets (e.g., \$0.05 of change buys a \$0.50 fractional lottery ticket).

The business may retain further winnings by providing winning tickets with portions of certain prize values. For example, customers may only be provided with shares of "jackpot" prizes (e.g. matching all six winning ticket numbers). Any other prizes are
20 retained by the business. Of course, such restrictions would typically be explained to the customers through advertising and printed information on the fractional lottery ticket.

Although the present invention has been described with respect to a preferred embodiment thereof, those skilled in the art will note that various substitutions may be made to those embodiments described herein without departing from the spirit and scope of the

present invention. For example, the present invention is applicable to many types of games besides lotteries in which prizes are awarded. In addition, in some embodiments the data stored on the store controller may instead be stored among the POS terminals. Similarly, some of the functions performed by the store controller may be performed by the POS
5 terminal, and vice versa.

A method and apparatus are provided whereby an upsell to offer to a customer is determined from the items in his purchase, according to predefined relationships. Such relationships between items in a purchase and upsells to offer may be described conceptually by a table that includes both the items and the upsells. The table, in turn, describes a corresponding
10 database defining upsells to offer when a customer's purchase consists of particular items.

Such a table-based embodiment is particularly easy for a typical store manager to understand. For example, a store manager of a fast-food restaurant might desire to see what upsells can be offered to a customer that orders a hamburger and small French fries. The store manager may search the table for entries that correspond to a hamburger and small
15 French fries, and then determines corresponding upsells from those entries.

Such a table-based embodiment is also easy for a typical store manager to adjust as necessary. For example, a store manager might determine that a significant number of customers who order a hamburger and small French fries would also find a dessert appealing. The store manager could then adjust the table (which represents a database) to
20 include an entry which defines a dessert upsell for purchases that consist of a hamburger and small French fries.

Since upsells are exchanged for spare change due, not all customers pay the same price for the same upsell. For example, if a customer has a first purchase price of \$4.64, a particular upsell may be offered in exchange for payment of a rounded price that is \$5.00

(\$4.64 rounded to the nearest dollar). The customer would thus pay \$0.36 for the upsell.

However, another customer with a second purchase price of \$4.72 may be offered the same upsell for \$5.00 (\$4.72 rounded to the nearest dollar). Thus, this customer would pay \$0.28 for the same upsell. Accordingly, the upsell is not a product that is merely on-sale and has a
5 fixed price for every customer. Instead, the upsell is purchased for an amount that may be different for every customer: an amount necessary to round the purchase price to some rounding multiple.

Referring to FIG. 41, a POS terminal 3010 comprises a processor 3012, such as one or more conventional microprocessors. The processor 3012 is in communication with a data
10 storage device 3014, such as an appropriate combination of magnetic, optical and/or semiconductor memory. The processor 3012 and the storage device 3014 may each be (i) located entirely within a single computer or other computing device; (ii) connected to each other by a remote communication medium, such as a serial port cable, telephone line or radio frequency transceiver; or (iii) a combination thereof. For example, the POS terminal
15 3010 may comprise one or more computers that are connected to a remote server computer for maintaining databases.

An input device 3016, a printer 3018 and a display device 3020 are each in communication with the processor 3012. The input device 3016 preferably comprises a keypad for transmitting input signals, such as signals representative of a purchase, to the
20 processor 3012. The input device 3016 may also comprise an optical bar code scanner for reading bar codes and transmitting signals representative of those bar codes to the processor 3012. The printer 3018 is for registering indicia on paper or other material, thereby printing receipts as commanded by the processor 3012. The display device 3020 is preferably a video monitor for displaying at least alphanumeric characters to the customer and/or a

cashier operating the POS terminal 3010. Many types of input devices, printers and display devices are known to those skilled in the art, and need not be described in detail herein.

The storage device 3014 stores a program 3022 for controlling the processor 3012. The processor 3012 performs instructions of the program 3022, and thereby operates in
5 accordance with the present invention, and particularly in accordance with the methods described in detail herein. The program 3022 furthermore includes program elements that may be necessary, such as an operating system and "device drivers" for allowing the processor 3012 to interface with computer peripheral devices, such as the input device 3016, the printer 3018 and the display device 3020. Appropriate device drivers and other
10 necessary program elements are known to those skilled in the art, and need not be described in detail herein.

The storage device 3014 also stores (i) an inventory database 3024; (ii) a possible upsells database 3026; (iii) an upsell offer database 3028; and (iv) an accepted offer database 3030. The databases 3024, 3026, 3028 and 3030 are described in detail below and
15 depicted with exemplary entries in the accompanying figures. As will be understood by those skilled in the art, the schematic illustrations of, and accompanying descriptions of the databases presented herein are exemplary arrangements for stored representations of information. A number of other arrangements may be employed besides the tables shown. Similarly, the illustrated entries represent exemplary information, but those skilled in the art
20 will understand that the number and content of the entries can be different from those illustrated herein.

Referring to FIG. 42, another embodiment of a POS terminal 3040 includes a control device 3042 which is in communication via a communication medium 3044 with a system 3046 for printing receipts and/or coupons. The control device 3042 comprises a processor

3048 that is in communication with the input device 3016 (FIG. 41) and the display device 3020 (FIG. 41). The system 3046 for printing comprises a processor 3050 in communication with the storage device 3014 (FIG. 41) and the printer 3018 (FIG. 41). In this embodiment, the control device 3042 may be a cash register, and the system 3046 may
5 be an electronic device for printing coupons in accordance with data received from the cash register. Other configurations of POS terminals will be understood by those skilled in the art.

Referring to FIG. 43, the inventory database 3024 of FIG. 41 includes entries 3100, 3102, 3104, 3106, 3108, 3110, 3112 and 3114, each defining an item which may be
10 purchased. Each entry includes (i) an item identifier 3116 that uniquely identifies the item; (ii) an item description 3118; (iii) an item price 3120; and (iv) an item cost 3122. For each entry, the item price 3120 indicates a price that a customer normally pays for the corresponding item, and the item cost 3122 indicates a cost of the item to the business. Accordingly, the item cost 3122 may be, for example, a price that the business itself pays for
15 the item. In some embodiments, the inventory database 3024 may also include an indication of the quantity available of each item.

Referring to FIG. 44, the possible upsells database 3026 of FIG. 41 includes entries 3140, 3142, 3144 and 3146, each defining an upsell that may be offered to a customer in exchange for change due. Each entry includes (i) an upsell identifier 3148 that uniquely
20 identifies the upsell; and (ii) an upsell description 3150.

Referring to FIG. 45, a table 3155 illustrates one embodiment of the upsell offer database 3028 (FIG. 41). The table 3155 includes entries 3160, 3162, 3164, 3166, 3168 and 3170, each defining upsells to offer when a customer's purchase consists of particular items. Each entry includes (i) items 3172 included in the purchase; and (ii) upsells 3174 to offer.

For example, if a purchase consists of small French fries and a large cola, then the entry 3164 indicates that the upsell "D" is to be offered. As illustrated by the entry 3146 of the possible upsells database 3026 (FIG. 44), the upsell "D" is an upgrade from small French fries to large French fries. Accordingly, if the customer accepted this offer, he would

5 receive large French fries and a large cola.

The items included in a particular purchase may correspond to more than one entry of the upsell offer database 3028. For example, a purchase that consists of a hamburger and small French fries corresponds to the entry 3160 and to the entry 3162. If a purchase corresponds to more than one entry, then one entry may be selected at random, or in

10 accordance with direction from a cashier, and the upsell(s) corresponding to this entry are offered to the customer. Alternatively, the customer may be allowed to select from amongst the entries, and thereby choose the upsell(s) corresponding to the selected entry.

An entry of the upsell offer database 3028 may indicate more than one upsell. For example, the entry 3166 indicates that a customer purchasing a hamburger, large cola and

15 small French fries is offered upsells "C" and "D". Similarly, the entry 3168 indicates that a customer purchasing a hamburger, a large cola and medium French fries is offered upsells "C" and "C" (two units of upsell "C"). As indicated by the entry 3144 of the possible upsells database 3026 (FIG. 44), the upsell "C" is an apple pie. Accordingly, if the customer accepted this offer, he would receive a hamburger, a large cola, medium French fries and

20 two apple pies.

A rounded price that the customer pays for both the items and the upsell(s) may be determined by rounding up the purchase price to a predetermined multiple, such as to the next higher dollar amount. Alternatively, the upsell offer database 3028 may indicate the rounded price, directly or indirectly, as described below.

Referring to FIG. 46, a table 3180 illustrates another embodiment of the upsell offer database 3028 (FIG. 45). The table 3180 includes entries 3190, 3192, 3194, 3196, 3198 and 3200, each defining upsells to offer when a customer's purchase consists of particular items. Each entry includes (i) items included in the purchase 3202; (ii) upsells 3204 to offer; and

5 (iii) a rounded price 3206 to charge for the items and the upsells if the customer accepts the offer. For example, if a purchase consists of a hamburger, a large cola and large French fries, and upsell "C" is offered and accepted in accordance with the entry 3200, then the entry 3200 also indicates that a rounded price of \$5.00 is charged to the customer. Although the exemplary rounded prices depicted in FIG. 46 are each multiples of one dollar, the

10 rounded prices may be multiples of any value, such as five dollars or twenty-five cents.

Referring to FIG. 47, a table 3220 illustrates another embodiment of the upsell offer database 3028 (FIG. 45). The table 3220 includes entries 3222, 3224, 3226, 3228, 3230 and 3232, each defining upsells to offer when a customer's purchase consists of particular items. Each entry includes (i) items included in the purchase 3234; (ii) upsells 3236 to offer; and

15 (iii) an upsell price 3238 to be added to the purchase price if the customer accepts the offer. Preferably, the upsell prices are such that, when added to the corresponding purchase price, the resulting sum is a rounded price, such as a multiple of a dollar.

Referring to FIG. 48, a table 3250 illustrates another embodiment of the upsell offer database 3028 (FIG. 45). The table 3250 includes entries 3252, 3254, 3256, 3258, 3260 and

20 3262, each defining upsells to offer when a customer's purchase consists of particular items. Each entry includes (i) items included in the purchase 3264; (ii) upsells 3266 to offer; and (iii) a rounding multiple 3268 that indicates an amount to which the purchase price is rounded if the customer accepts the offer. Thus, the purchase price would be determined, and then rounded in accordance with the corresponding rounding multiple to yield a rounded

price. For example, the entries 3252, 3254, 3256, 3258, 3260 and 3262 each define that the purchase price is rounded to the nearest dollar.

Referring to FIG. 49, a method 3280 for providing a supplementary product sale at a POS terminal initiates when the POS terminal receives the items in a purchase (step 3282).

- 5 Typically, each item will have a bar code that is scanned by a bar code scanner, and the POS terminal in turn receives, from the bar code scanner, signals representative of the items.

Alternatively, various keys of the input device 3016 may be pressed to generate signals representative of the items. The POS terminal then determines an upsell based on the items (step 3284). To determine the upsell, the POS terminal may search the upsell offer database

- 10 3028 (FIG. 41) in order to determine one or more records that correspond to the items, and thereby determine the corresponding upsells of those records.

The POS terminal determines a rounded price that the customer may pay for both the items and the upsell(s) (step 3286). As described above, the rounded price may be

determined by rounding up the purchase price to a predetermined multiple, such as to the

- 15 next higher dollar amount. In other embodiments, the rounded price is determined from the upsell offer database. In one embodiment, the rounded price may be determined based on a record of the upsell offer database. For example, as described above with respect to FIG.

46, each entry of the upsell offer database may include the rounded price. In another embodiment, as described above with respect to FIG. 47, each entry of the upsell offer

- 20 database may include a rounding multiple, and the purchase price is rounded in accordance with the rounding multiple to thereby generate the rounded price. In still another embodiment, as described above with respect to FIG. 48, each entry of the upsell offer database may include an upsell price that is added to the purchase price to thereby generate the rounded price.

The customer is provided with an offer to exchange (purchase) the items and the upsell(s) for the rounded price (step 3288). For example, the POS terminal may output an indication of the upsell(s), such as the name of the upsell(s), on the display device 3020 (FIG. 41). If the customer accepts the offer, a required payment amount is set to be the

5 rounded price. This required payment amount is an amount of money expected to be paid in return for products provided to the customer. From the required payment amount, the processor 3012 (FIG. 41) may determine, for example, the total amount of money that should have been collected by the POS terminal at the end of a day. Those skilled in the art will note that the required payment amount is typically stored on the data storage device

10 3014, and may comprise, for example, a single stored value for the transaction or a plurality of values which each correspond to an amount of money expected to be paid for one or more products in the transaction.

The customer responds to the offer, and the response is received by the POS terminal when a key on the input device 3016 is pressed, or in other manners known to those skilled

15 in the art (step 3290). If the response indicates acceptance of the offer, the items and the upsell(s) are exchanged for the rounded price (step 3292). If desired, the POS terminal makes appropriate adjustments to stored indications of available quantities of items to reflect that the items and upsell(s) have been sold. The POS terminal may also store the response to the offer for accounting and marketing analysis.

20 Applicants have recognized that supplementary processes performed by POS terminals may introduce delays in the completion of customer transactions, and that these delays may be acceptable under certain circumstances. For example, when there are few pending customer transactions, such delays do not significantly affect relevant measures of performance such as sales per hour or profit per hour.

Accordingly, performing supplementary processes during periods of low activity, yet reducing or refraining from supplementary processes during periods of high activity, can result in increased profit. Such increased profit can exceed the profit of POS terminals that either always perform the supplemental process or never perform the supplemental process.

5 In one embodiment of the present invention, a POS terminal measures one or more criteria, such as an activity rate of a terminal, and performs a supplementary process if the criteria are less than predetermined thresholds. In another embodiment, a POS terminal measures an activity rate of a terminal, determines an offer schedule in accordance with the activity rate, and in turn provides a supplementary product offer in accordance with the offer
10 schedule. The offer schedule may specify that time-consuming offers (offers with a low "offer speed") are made during periods of low terminal activity, while quicker offers (offers with a high "offer speed") are made during periods of higher terminal activity.

It is particularly desirable to provide an offer to exchange spare change due for an upsell, as described in the aforementioned parent application, Application No. 08/920,116.
15 Accordingly, the present invention contemplates providing offers for upsells having high performance rates. In addition, the present invention contemplates providing offers for different upsells in accordance with an offer schedule.

Referring to FIG. 50, a POS terminal 4010, which may be the IBM "4683" or IBM "4693" manufactured by International Business Machines, comprises a processor 4012, such
20 as one or more conventional microprocessors. The processor 4012 is in communication with a data storage device 4014, such as an appropriate combination of magnetic, optical and/or semiconductor memory. The processor 4012 and the storage device 4014 may each be (i) located entirely within a single computer or other computing device; (ii) connected to each other by a remote communication medium, such as a serial port cable, telephone line or
25 radio frequency transceiver; or (iii) a combination thereof. For example, the POS terminal 4010 may comprise one or more computers which are connected to a remote server computer for maintaining databases.

An input device 4016 preferably comprises a keypad for transmitting input signals, such as signals indicative of a purchase, to the processor 4012. A printer 4018 is for
30 registering indicia on paper or other material, thereby printing receipts, coupons and vouchers as commanded by the processor 4012. A display device 4020 is preferably a video monitor for displaying at least alphanumeric characters to the customer and/or cashier.

Many types of input devices, printers and display devices are known to those skilled in the art, and need not be described in detail herein. The input device 4016, printer 4018 and display device 4020 are each in communication with the processor 4012.

A sensor 4022 is also in communication with the processor 4012. The sensor 4022 and processor 4012 may be used to measure, for example, the number of customers entering a store or the number of customers in the vicinity of the POS terminal 4010. Many other types of sensors are known and need not be described in detail herein.

The storage device 4014 stores a program 4024 for controlling the processor 4012. The processor 4012 performs instructions of the program 4024, and thereby operates in accordance with the present invention, and particularly in accordance with the methods described in detail herein. The program 4024 furthermore includes program elements that may be necessary, such as an operating system and "device drivers" for allowing the processor to interface with computer peripheral devices, such as the input device 4016, the printer 4018, the display device 4020 and the sensor 4022. Appropriate device drivers and other necessary program elements are known to those skilled in the art, and need not be described in detail herein.

FIG. 51 illustrates another embodiment of the POS terminal 10 of FIG. 50, in which a control device 4028 is in communication via a communication medium 4030 with a system 4032 for providing a supplementary process. The control device 4028 comprises a processor 4034 in communication with the input device 4016 and the display device 4020. The system 4032 for providing a supplementary process comprises a processor 4036 in communication with the storage device 4014, the printer 4018 and the sensor 4022. In this embodiment, the control device 4028 may be a cash register, and the system 4032 may be an electronic device connected thereto for printing coupons in accordance with data received from the cash register. Other configurations of the POS terminal 4010 will be understood by those skilled in the art.

Referring to FIG. 52, a method 4040 for controlling the performance of a supplementary process initiates with the POS terminal 4010 of FIG. 50 and FIG. 51 measuring one or more criteria, such as the activity rate of the POS terminal 4010 (step 4042). For example, the POS terminal 4010 may measure the number of completed transactions per time (transaction rate), the number of items purchased through the POS terminal 10 per period of time (item sale rate), or the number of upsells accepted by

customers per period of time (upsell acceptance rate). The POS terminal 4010 may measure the number of customers, such as the number of customers in a store or the number of customers in the vicinity of the POS terminal 4010, through input signals received from the sensor 4022. Many other types of measurements may be made by the POS terminal 4010.

5 The POS terminal 4010 then determines, based on the measured activity rate or other criteria, whether to perform a supplementary process, such as offering an upsell in exchange for change due. In one embodiment, the POS terminal 4010 compares the activity rate to a predetermined threshold. Such a threshold may be determined (step 4044) in a number of ways. For example, the threshold may be a predetermined value (e.g. a rate of three
10 transactions per minute), or a variable value (e.g., three transactions per minute after 5:00 PM, two transactions per minute otherwise). Many methods of calculating thresholds, based on many variables such as time of day and day of the week, will be understood by those skilled in the art.

 Once the threshold is determined, the activity rate is compared to the predetermined
15 threshold (step 4046). One comparison is to determine whether the activity rate is less than the threshold. For example, the POS terminal 4010 may determine whether the measured number of completed transactions in the last ten minutes is less than a predetermined threshold of seven transactions per ten minute period.

 If the comparison is valid, (e.g., the measured activity rate is less than the threshold),
20 then the POS terminal 4010 performs the supplementary process (step 4048). The POS terminal 4010 may perform the supplementary process by executing instructions of the program 4024 (FIG. 50). Alternatively, the POS terminal 4010 may perform the supplementary process by sending control signals from the control device 4028 (FIG. 51) to the system 4032 for providing a supplementary process. In such an embodiment, the control
25 device 4028 determines whether to enable or disable the system 4032. For example, the control device 4028 may disable the system 4032 if the activity rate is greater than a predetermined threshold, and enable the system 4032 if the activity rate is less than the predetermined threshold. The control device 4028 may enable and disable the system 4032 by transmitting thereto appropriate enable signals and disable signals. Such signals may be
30 control signals, which serve only to enable or disable the performance of the supplementary process, or may be data signals, which contain additional information for use by the system 4032. Instead of separate enable and disable signals, the control device 4028 may transmit

to the system 4032 a signal that toggles the system 4032 between an enabled mode and a disabled mode.

It will be understood by those skilled in the art that the system 4032 may alternatively be "enabled-until-disabled". In other words, the control device 4028 would only need to transmit a disable signal when the supplementary process is not to be performed. When no disable signal is transmitted to the system 4032, the system 4032 would perform the supplementary process (even if no enable signal is received). Similarly, the system 4032 may be "disabled-until-enabled". In other words, the control device 4028 would only need to transmit an enable signal when the supplementary process is to be performed. When no enable signal is transmitted to the system 4032, the system 4032 would not perform the supplementary process (even is no disable signal is received).

As an illustration of the above-described method 4040, the POS terminal may measure an activity rate, and determine if the activity rate is less than a predetermined threshold. If so, the POS terminal then determines an upsell in dependence on a purchase, as described in a parent application of the present application, Patent Application No. 08/920,116, entitled METHOD AND SYSTEM FOR PROCESSING SUPPLEMENTARY PRODUCT SALES AT A POINT-OF-SALE TERMINAL, filed on August 26, 1997. The POS terminal further determines an upsell price in dependence on the purchase, and offers the customer an upsell in exchange for the upsell price.

In the above-described embodiments, the POS terminal 4010 determines whether a supplementary process is or is not performed. In other embodiments, the POS terminal 4010 may further select a supplementary process based on the measured activity rate or other criteria. For example, it may be desirable that different types of offers are provided to customers depending on the activity rate of the POS terminal. In particular, more time-consuming offers are provided when the measured activity rate is low, while quicker offers are provided when the measured activity rate is high.

FIG. 53 is a table 4060 that illustrates an offer schedule, which may be implemented as a database stored on the storage device 4014 in a manner well known in the art. Each row of the table 4060 represents an entry, and each entry defines an upsell to offer for an activity rate. In particular, each entry includes an activity rate identifier 4062 that uniquely identifies the entry, an activity rate 4064 which describes a rate or range of rates, and an upsell to offer 4066 at that activity rate. As described in Patent Application No. 08/920,116,

the upsell to offer 4066 may include two or more upsells which are offered one at a time until an upsell is accepted.

An entry 4068, corresponding to activity rates less than eight transactions per fifteen-minute period, indicates that an additional product is to be offered during these (relatively low) activity rates. Additional product offers typically have low "offer speeds", since it may be several seconds for a cashier to retrieve the additional product if the offer is accepted by the customer. An entry 4070, corresponding to activity rates between eight and fifteen transactions per fifteen-minute period, indicates that a "triple-your-change" coupon is to be offered during these activity rates. Typically, printing a coupon is quicker than offering an additional product. A coupon offer thus has a higher offer speed, which is why a coupon is to be offered during periods of higher terminal activity. An entry 4072 indicates that no offer is to be provided at activity rates greater than fifteen transactions per fifteen-minute period.

The above embodiments describe how the POS terminal automatically controls the performance of a supplementary process. It may further be desirable to provide a method and apparatus to, at times, counteract such automatic control. Allowing a manual override of the decision of the POS terminal would provide even finer control over the performance of the supplementary process. For example, a store manager may wish to test the supplementary process, even though the POS terminal is not currently performing the supplementary process. In addition, there may be certain situations, which a device cannot accurately account for, in which a supplementary process should not be performed.

Referring to FIG. 54, an apparatus 4080 includes an override decision manager 4082 which receives input from an override signal circuit 4084 and from an automatic control signal circuit 4086. The override signal circuit 4084 is a device that provides an override signal, such as a switch in communication with the POS terminal. The override signal circuit 4084 may be one or more keys on the input device 4016 (FIG. 50 and FIG. 51), or may be another device that transmits and/or generates signals. The automatic control signal circuit 4086 is the portion of the POS terminal that provides the control signal for controlling automatic performance of the supplementary process, as described above. The override decision manager 4082 receives the override signal and control signal from circuits 4084 and 4086, respectively, and generates in dependence thereon an "enhanced control" signal for controlling performance of the supplementary process. The enhanced control

signal is transmitted to a system 4088 for performing a supplementary process. The system 4088 may be a software module which is a component of the POS terminal 4010 of FIG. 50, or may be the system 4032 for providing a supplementary process of FIG. 51.

The override signal may be used to counteract the performance of the supplementary process that would have otherwise occurred in accordance with the control signal from the automatic control signal circuit 4086. Referring to Table 1 below, the Truth Table shown describes the output (Enhanced Control Signal) as a function of the inputs (Override Signal and Control Signal). Table 1 describes an embodiment where the override signal may attain one of two values (i.e., 0 or 1). However, those skilled in the art will understand that the override signal may attain more than two values.

Override Signal	Control Signal	Enhanced Control Signal
0	0	0
0	1	1
0	0	0
1	1	0

where:

Override Signal = 0 for Allowing Automatic Control

Override Signal = 1 for Disabling the Supplemental Process

Control Signal = 0 for Disabling the Supplemental Process

Control Signal = 1 for Enabling the Supplemental Process

Enhanced Control Signal = 0 for Disabling the Supplemental Process

Enhanced Control Signal = 1 for Enabling the Supplemental Process

TABLE 1 – Truth Table for Override Decision Manager

For example, when Override Signal = 1 and Control Signal = 1, then a user is overriding the automatic determination to enable the supplemental process. Accordingly, the Enhanced Control Signal = 0, and the supplemental process is disabled.

Referring to FIG. 55, a network 4100 includes a server computer 4102 in communication with POS terminals 4104, 4106 and 4108. The server computer 4102 may itself be a POS terminal, as described above. Although three POS terminals are shown in FIG. 55, any number of POS terminals may be in communication with the server computer 4102 without departing from the spirit and scope of the present invention. The server computer 4102 may perform many of the above-described processes, especially those processes which are performed for more than one POS terminal. For example, the server computer 4102 may (i) measure the activity rate of any or all of the POS terminals 4104, 4106 and 4108, (ii) determine whether to provide a supplementary process at any or all of the POS terminals 4104, 4106 and 4108, (iii) enable or disable one or more systems for providing a supplementary process, and/or (iv) transmit an override signal to any or all of the POS terminals 4104, 4106 and 4108. The server computer 4102 may also collect data from the POS terminals 4104, 4106 and 4108, thereby aggregating information about the processes that each POS terminal performs. For example, each POS terminal may measure its own activity rate, and transmit to the server computer 4102 signals indicative of the measured activity rate. The server computer 4102 may then determine an overall activity rate for the network 4100 of POS terminals.

The measured activity rate may be, for example, the number of POS terminals in use (processing transactions) or the percentage of POS terminals in use. Based on the activity rate, the server computer 4102 may determine whether to permit the supplementary process to be performed at each POS terminal. Alternatively, the server computer 4102 may determine which of the POS terminals are to perform the supplementary process.

FIG. 56 shows a table 4120 that illustrates an offer schedule for a network of POS terminals. Each row of the table 4120 represents an entry, and each entry defines an upsell to offer for an activity rate. The activity rate used in the table 4120 is based on which of a plurality of terminals are in use. Each entry includes an activity rate identifier 4122 that uniquely identifies the entry, an activity rate 4124 which describes a rate or range of rates, and an upsell to offer 4126 at that activity rate. For example, the entry 4128, corresponding to less than 50% of all POS terminals in use, indicates that three products are to be offered,

and the customer is to choose one. The entries 4130, 4132 and 4134 similarly describe upsells to be offered for different activity rates. As described above, more time-consuming upsells such as multiple upsells offered one after the other may be offered during periods of lower activity.

- 5 The present invention allows a customer to select an upsell before a purchase is processed at a POS terminal. Thus, the customer need not be offered a system-selected upsell at the POS terminal that may be rejected. The present invention thus may save time at the POS terminal. The selected upsell also indicates an amount to which the purchase price should be rounded, saving even more time.

- 10 If a business has old or aging inventory, it may be advantageous to allow that inventory to be selected as an upsell in exchange for change due. Customers would act to clear the inventory, and thereby eliminate the costs of otherwise disposing of the inventory.

- Referring to FIG. 57, a POS terminal 5010, which may be the IBM "4683" or IBM "4693" manufactured by International Business Machines, comprises a processor 5012, such
- 15 as one or more conventional microprocessors. The processor 5012 is in communication with a data storage device 5014, such as an appropriate combination of magnetic, optical and/or semiconductor memory. The processor 5012 and the storage device 5014 may each be (i) located entirely within a single computer or other computing device; (ii) connected to each other by a remote communication medium, such as a serial port cable, telephone line or
- 20 radio frequency transceiver; or (iii) a combination thereof. For example, the POS terminal 5010 may comprise one or more computers which are connected to a remote server computer for maintaining databases.

- An input device 5016 preferably comprises a keypad for transmitting input signals, such as signals indicative of a purchase, to the processor 5012. The input device 5016 may
- 25 also comprise an optical bar code scanner for reading bar codes and transmitting signals

indicative of those bar codes to the processor 5012. A printer 5018 is for registering indicia on paper or other material, thereby printing receipts, coupons and vouchers as controlled by the processor 5012. A display device 5020 is preferably a video monitor for displaying at least alphanumeric characters to the customer and/or cashier. Many types of input devices, printers and display devices are known to those skilled in the art, and need not be described in detail herein. The input device 5016, printer 5018 and display device 5020 are each in communication with the processor 5012.

The storage device 5014 stores a program 5022 for controlling the processor 5012. The processor 5012 performs instructions of the program 5022, and thereby operates in accordance with the present invention, and particularly in accordance with the methods described in detail herein. The program 5022 furthermore includes program elements that may be necessary, such as an operating system and "device drivers" for allowing the processor 5012 to interface with computer peripheral devices, such as the input device 5016, the printer 5018 and the display device 5020. Appropriate device drivers and other necessary program elements are known to those skilled in the art, and need not be described in detail herein.

The storage device 5014 also stores (i) inventory database 5024; (ii) rounding code database 5026; and (iii) transaction database 5028. The databases 5024, 5026 and 5028 are described in detail below and depicted with exemplary entries in the accompanying figures. As will be understood by those skilled in the art, the schematic illustrations and accompanying descriptions of the databases presented herein are exemplary arrangements for stored representations of information. A number of other arrangements may be employed besides the tables shown. Similarly, the illustrated entries represent exemplary

information, but those skilled in the art will understand that the number and content of the entries can be different from those illustrated herein.

FIG. 58 illustrates another embodiment of the POS terminal 5010, in which a control device 5029 is in communication via a communication medium 5030 with a system 5032 for providing an offer for an upsell. The control device 5029 comprises a processor 5034 in communication with the input device 5016 and the display device 5020. The system 5032 for providing an offer comprises a processor 5036 in communication with the storage device 5014 and the printer 5018. In this embodiment, the control device 5029 may be a cash register, and the system 5032 may be an electronic device for printing coupons in accordance with data received from the cash register. Other configurations of the POS terminal 5010 will be understood by those skilled in the art.

Referring to FIG. 59, a network 5040 includes a server 5042 in communication with POS terminals 5044, 5046 and 5048. The server 5042 directs the operation of, stores data from and transmits data to the POS terminals 5044, 5046 and 5048. The server 5042 may itself be a POS terminal, as described above, or may be another computing device that can communicate with one or more POS terminals. Although three POS terminals are shown in FIG. 59, any number of POS terminals may be in communication with the server 5042 without departing from the spirit and scope of the present invention. Each of the POS terminals 5044, 5046 and 5048 may be located in the same store, in different stores of a chain of stores, or in other locations. The server 5042 may perform many of the processes described below, especially those processes that are performed for more than one POS terminal. The server 5042 may furthermore store data, such as the inventory database 5024 (FIG. 57), that is to be shared by the POS terminals 5044, 5046 and 5048.

Referring to FIG. 60, the inventory database 5024 includes rows 5032, 5033, 5034, 5035, 5036, 5037 and 5038, each of which represents an entry of the inventory database 5024. Each entry defines an item of inventory that may be sold. In particular, each entry includes (i) an item identifier 5040 that uniquely identifies the entry; (ii) a description 5042 that describes the item of inventory; (iii) a price 5044 of the item; and (iv) an taxable status 5046 that indicates whether the item is subject to sales tax (or other tax). The inventory database 5024 is accessed to determine a purchase price in a manner known in the art. For example, each item of a purchase may include a bar code that can be read by a POS terminal. The price of each item, corresponding to the bar code identifier, would in turn be determined from the inventory database 5024. The sum of the item prices and any appropriate taxes applied thereto would yield the purchase price.

Referring to FIG. 61, the rounding code database 5026 includes rows 5050, 5052 and 5054, each of which represents an entry of the rounding code database 5026. Each entry defines a rounding code. In particular, each entry includes (i) a rounding code identifier 5056 that uniquely identifies the entry; (ii) a rounding multiple 5058 that indicates an amount to which a purchase price is to be rounded; and (iii) a fixed value 5060 that indicates a fixed price to pay for the corresponding upsell, if the upsell is not purchased for an amount of change due. For example, a rounding code corresponding to the entry 5050, identified by "567", has a rounding multiple of \$1. Thus, if a purchase includes an upsell having the rounding code "567", the corresponding purchase price will be rounded to next higher dollar amount (e.g. from \$7.38 to \$8.00). It can be advantageous, and simpler for customers, to set the rounding multiple of each upsell equal to the fixed price of that upsell.

The upsells are accessible to customers, allowing customers to select the upsells as they select the items of their purchase. Each upsell has a rounding code which may be

determinable from a bar code printed on an adhesive label that is affixed to the upsell. For example, in a bookstore, there may a set of bins located near the POS terminals. Each bin holds several books, each having a bar code. The customer selects a book from a bin, and brings it to the POS terminal with the items he wishes to purchase. An optical bar code scanner of the POS terminal reads the bar code of the book, and the bar codes of the items of the purchase.

Instead of a bar code, each upsell may include another indication of the corresponding rounding code. For example, each book in a first bin may be affixed with a green adhesive label, and each book in a second bin may be affixed with a blue adhesive label. In such an embodiment, the green adhesive label would indicate a first rounding code, and the blue adhesive label would indicate a second rounding code. A cashier or other operator of the POS terminal would in turn press a button or otherwise allow the POS terminal to receive data indicating the rounding code.

It can be advantageous for upsells having the same rounding code to be grouped together. For example, a first bin could contain a number of books that each have a first rounding code. A second bin could contain a number of books that each have a second rounding code. If any book from the first bin is selected as an upsell, the purchase price would be rounded to a first multiple (e.g. the nearest \$5). Similarly, selecting any book from the second bin would cause the purchase price to be rounded to a second multiple (e.g. the nearest \$10).

Referring to FIG. 62, the inventory database 5024 and the rounding code database 5026 are used in determining an amount of money due as payment for items of a purchase and an upsell. Tables 5080 and 5082 each represent data corresponding to a transaction identified by a transaction identifier "12345678". Accordingly, the tables 5080 and 5082

represent data stored in the transaction database 5028 (FIG. 57). Typically, the transaction database 28 will include data representing a plurality of such transactions.

The table 5080 represents one or more items included in the transaction, and the table 5082 represents one or more upsells included in the transaction. The table 5080

5 includes entries 5084 and 5086, each defining a type of item to purchase. Each entry includes (i) an item identifier 5088; corresponding to the item identifier 5040 of FIG. 60; (ii) a quantity 5090 of the item; (iii) a price 5092 of each unit of the item, the price corresponding to the price 5044 of FIG. 60; and (iv) a price with tax 5094 of each unit of the item. The price with tax of an item may be determined from the corresponding price 5092,

10 the taxable status 5046 of FIG. 60 (which indicates whether the item is subject to sales tax or other tax), and a tax rate 5096. Those skilled in the art will readily understand that the tax rate 5096 may be, for example, stored on the storage device 5014 (FIG. 57) as a database or as a variable of the program 5024. The price with tax of each item is summed to yield a subtotal price with tax 5098. The subtotal price with tax 5098 is a price that would be due if

15 no upsell is included in the transaction.

The table 5082 includes an entry 5100 that defines an upsell included in the transaction. The entry 5100 includes (i) a rounding code identifier 5102, corresponding to the rounding code identifier 5056 of FIG. 61; (ii) a rounding multiple 5104, corresponding to the rounding multiple 5058 of FIG. 61; and (iii) a fixed value 5106, corresponding to the

20 fixed value 5060 of FIG. 61. The rounding multiple of the entry 5100 has the value \$5, indicating that the subtotal price with tax 5098 is to be rounded to the next higher multiple of \$5. Accordingly, the subtotal price with tax 5098, which has the value \$26.20, is rounded to the next higher multiple of \$5, yielding a rounded price 5108 having the value \$30.

FIG. 63 depicts a table 5120 that represents further information relating to transactions. Such information may be stored in the transaction database 5028 (FIG. 57) in certain embodiments of the present invention. The table 5120 includes entries 5122 and 5124, each defining further information relating to a transaction. Each entry includes (i) a transaction identifier 5126 that uniquely identifies the transaction; (ii) a date 5128 on which the transaction occurred; (iii) a time 5130 at which the transaction occurred; (iv) a POS terminal identifier 5132 that indicates the POS terminal at which the transaction occurred; and (v) a revenue 5134 that was derived from the transaction. Information represented by the table 5120 may be used, for example, in determining patterns in revenue generation over time.

FIG. 64 illustrates a method 5150 in which the above-mentioned databases are used in determining a rounded price for a purchase that includes an upsell and one or more items. A POS terminal receives a code for each item in the purchase (step 5152). For example, a bar code scanner reads a bar code imprinted on each item and generates signals indicative of the bar code. The POS terminal also receives a rounding code for an upsell (step 5154). Those skilled in the art will understand that the rounding code may be received before, during or after the receiving of the item codes. After all codes are received, the POS terminal determines a purchase price from the item codes (step 5156). As described above with reference to FIG. 62, the purchase price is determined by summing the price with tax of each item. The POS terminal determines a rounding multiple from the rounding code (step 5158) by accessing the rounding code database 5026 (FIG. 57). Based on the rounding multiple, the POS terminal rounds the purchase price to yield a rounded price (step 5160). The rounded price is the price due in exchange for the items and the upsell.

In the embodiments described above, one upsell was included in a purchase.

However, a plurality of upsells may be included in a purchase. In such an embodiment, one upsell would be sold in exchange for change due, while the remaining upsells would be sold at a fixed price. As described above with reference to FIG. 61, each rounding code has both
5 a fixed price and a rounding multiple. Thus, a fixed price may be determined for each upsell.

FIG. 65 illustrates a method 5180 for determining a rounded price for a purchase that includes a plurality of upsells with rounding codes. The POS terminal receives a code for each item in a purchase (step 5182) and also receives a rounding code for each of a plurality
10 of upsells (step 5184). As described above, a purchase price is determined from the item codes (step 5186).

One of the rounding codes is selected (step 5188), and its rounding multiple is determined (step 5190). The selection defines a selected rounding code and a set of unselected rounding codes. The set of unselected rounding codes may consist of one
15 rounding code (if there are two rounding codes) or more than one rounding code. The choice of which rounding code is selected may depend on different criteria. In one embodiment, the POS terminal selects a rounding code having the smallest (minimal) rounding multiple. That is, the POS terminal selects a rounding multiple that is not greater than the rounding multiple of each unselected rounding code. For example, if there are three
20 rounding codes, having corresponding rounding multiples of \$5, \$5 and \$10, then either of the first two rounding codes (having rounding multiples of \$5) would be selected.

Once a rounding code is selected, the fixed price of each remaining (unselected) rounding code is determined (step 5192). As described above, the fixed prices are determinable from the rounding code database 5026 (FIG. 57 and FIG. 61). These fixed

prices are added to the purchase price determined at step 5186, thereby generating an augmented price (step 5194). This augmented price is rounding based on the rounding multiple determined at step 5190, thereby generating a rounded price (step 5196). This rounded price is exchanged for the items and the upsells included in the purchase. Those
5 skilled in the art will understand that the step 5196 may be performed before the step 5194, rather than after.

Referring to FIG. 66, tables 5210 and 5212 each represent data corresponding to a transaction identified by a transaction identifier "12345671". Accordingly, the tables 5210 and 5212 represent data stored in the transaction database 5028 (FIG. 57). The table 5210,
10 similar to the table 5080 of FIG. 62, represents one or more items included in the transaction, and the table 5212, similar to the table 5082 of FIG. 62, represents upsells included in the transaction. The table 5210 includes entries 5214 and 5216, each defining a type of item to purchase. A subtotal price with tax 5218 and tax rate 5220 function as those described above with respect to FIG. 62.

15 The table 5212 includes entries 5222, 5224 and 5226 that each define an upsell included in the transaction. Similar to the table 5082 (FIG. 62), each entry of the table 5212 includes (i) a rounding code identifier 5228, corresponding to the rounding code identifier 5056 of FIG. 61; (ii) a rounding multiple 5230, corresponding to the rounding multiple 5058 of FIG. 61; and (iii) a fixed value 5232, corresponding to the fixed value 5060 of FIG. 61.
20 As described above, one upsell is selected to define a rounding multiple, and the remaining upsells have fixed prices that are added to the subtotal price with tax. In accordance with an embodiment described above, in the example described by FIG. 66 an upsell having a minimal rounding multiple is selected. Such an upsell may be either upsell defined by the

entries 5224 and 5226, each having a rounding multiple of \$1. Accordingly, the remaining two upsells have fixed prices of \$1 and \$10.

A table 5234 represents the use of the fixed prices of the upsells. The additional upsell fixed prices 5236, which is the sum of the fixed prices of the remaining (unselected) upsells, is \$11. Thus the subtotal price with the additional upsells 5238 is the sum of \$26.20 and \$11, which is \$37.20. This subtotal price is rounded in accordance with the rounding multiple of the selected upsell (\$1), generating a rounded price 5240 of \$38.00.

In another embodiment of the present invention, each upsell may have a corresponding "minimum price", which is a minimum difference between the subtotal price with tax and the rounded price. For example, if a subtotal price with tax is \$4.98, and a corresponding rounding multiple is \$5.00, then the rounded price would normally be \$5.00 (only \$0.02 extra). However, if a minimum price for the upsell is \$2.00, then a rounded price of \$7.00 (\$4.98 + \$2.00 rounded up to the nearest dollar) is generated.

One or more POS terminals control offers that are provided to customers, such that those offers which have high performance rates are provided. The present invention determines the best offers by providing customers with a group of offers, and evaluating the performance rates of the offers. By contrast, random or manual (human) selection of offers is unlikely to determine the best offers. Furthermore, the present invention advantageously relieves managers or other personnel of the task of selecting offers.

By continually evaluating the performance rates of offers, the offers provided to customers continue to be the highest performing. If the performance rate of a once-attractive offer decreases, it can be replaced by other, higher-performing offers.

The present invention may further make the offer appear to the customer to be random, since a POS terminal typically provides different offers at different times. This, in turn, can make it difficult for customers to manipulate the offer system to their advantage.

Referring to FIG. 67, a POS terminal 6010, which may be the IBM "4683" or IBM "4693" manufactured by International Business Machines, comprises a processor 6012, such as one or more conventional microprocessors. The processor 6012 is in communication with a data storage device 6014, such as an appropriate combination of magnetic, optical and/or semiconductor memory. The processor 6012 and the storage device 6014 may each be (i) located entirely within a single computer or other computing device; (ii) connected to each other by a remote communication medium, such as a serial port cable, telephone line or radio frequency transceiver; or (iii) a combination thereof. For example, the POS terminal 6010 may comprise one or more computers which are connected to a remote server computer for maintaining databases.

An input device 6016 preferably comprises a keypad for transmitting input signals, such as signals indicative of a purchase, to the processor 6012. A printer 6018 is for registering indicia on paper or other material, thereby printing receipts, coupons and vouchers as commanded by the processor 6012. A display device 6020 is preferably a video monitor for displaying at least alphanumeric characters to the customer and/or cashier. Many types of input devices, printers and display devices are known to those skilled in the art, and need not be described in detail herein. The input device 6016, printer 6018 and display device 6020 are each in communication with the processor 6012.

The storage device 6014 stores a program 6022 for controlling the processor 6012. The processor 6012 performs instructions of the program 6022, and thereby operates in accordance with the present invention, and particularly in accordance with the methods

described in detail herein. The program 6022 furthermore includes program elements that may be necessary, such as an operating system and "device drivers" for allowing the processor 6012 to interface with computer peripheral devices, such as the input device 6016, the printer 6018 and the display device 6020. Appropriate device drivers and other
5 necessary program elements are known to those skilled in the art, and need not be described in detail herein.

The storage device 6014 also stores (i) a database of offers 6024; (ii) a transaction database 6026; and (iii) a performance rate database 6028. The databases 6024, 6026 and 6028 are described in detail below and depicted with exemplary entries in the accompanying
10 figures. As will be understood by those skilled in the art, the schematic illustrations and accompanying descriptions of the databases presented herein are exemplary arrangements for stored representations of information. A number of other arrangements may be employed besides the tables shown. Similarly, the illustrated entries represent exemplary information, but those skilled in the art will understand that the number and content of the
15 entries can be different from those illustrated herein.

FIG. 68 illustrates another embodiment of the POS terminal 6010, in which a control device 6028 is in communication via a communication medium 6030 with a system 6032 for providing an offer. The control device 6028 comprises a processor 6034 in communication with the input device 6016 and the display device 6020. The system 6032 for providing an
20 offer comprises a processor 6036 in communication with the storage device 6014 and the printer 6018. In this embodiment, the control device 6028 may be a cash register, and the system 6032 may be an electronic device for printing coupons in accordance with data received from the cash register. Other configurations of the POS terminal 6010 will be understood by those skilled in the art.

Referring to FIG. 69, a network 6040 includes a server 6042 in communication with POS terminals 6044, 6046 and 6048. The server 6042 directs the operation of, stores data from, and transmits data to the POS terminals 6044, 6046 and 6048. The server 6042 may itself be a POS terminal, as described above, or may be another computing device which can communicate with one or more POS terminals. Although three POS terminals are shown in FIG. 69, any number of POS terminals may be in communication with the server 6042 without departing from the spirit and scope of the present invention. Each of the POS terminals 6044, 6046 and 6048 may be located in the same store, in different stores of a chain of stores, or in other locations. The server 6042 may perform many of the processes described below, especially those processes that are performed for more than one POS terminal. The server 6042 may furthermore store data such as the database of offers 6024.

Referring to FIG. 70, a table 6060 illustrates an embodiment of the database of offers 6024 (FIG. 67). The table 6060 includes entries 6062, 6064, 6066 and 6068, each of which describes an offer to be provided to customers. It will be understood by those skilled in the art that the table 6060 may include any number of entries. Each of the entries 6062, 6064, 6066 and 6068 specifies (i) an offer identifier 6070 for uniquely indicating the offer; (ii) an offer description 6072 for describing the offer; (iii) a cost of the offer 6074 to the offeror; and (iv) an offer frequency 6076. The offer frequency 6076 indicates the average percentage of times that the corresponding offer is to be provided when an offer is provided. For example, each of the entries 6062, 6064, 6066 and 6068 includes an offer frequency of 25%, and thus each of the entries 6062, 6064, 6066 and 6068 will be provided to customers approximately one out of every four times an offer is provided, on average.

Referring to FIG. 71, a record 6090 of the transaction database 6026 (FIG. 67) defines the transactions performed at a POS terminal identified by a POS terminal identifier

6092. The transaction database 6026 (FIG. 67) typically includes a plurality of records such as the record 6090, each defining the transactions performed at a different POS terminal. The record 6090 includes entries 6094, 6096 and 6098 which each describe a transaction. It will be understood by those skilled in the art that the record 6090 may include any number
5 of entries. Each of the entries 6094, 6096 and 6098 specifies (i) a transaction identifier 6100 that uniquely indicates a transaction; (ii) a date 6102 of the transaction; (iii) a time 6104 of the transaction; (iv) a purchase description 6106 that describes details of the transaction, such as the items purchased, the purchase price and/or the identity of the customer; (v) an offer identifier 6108 that indicates an offer that was provided during the transaction; (vi) an
10 indication of whether the offer was accepted 6110; and (vii) a revenue 6112 that is derived due to the customer accepting the offer.

Referring to FIG. 72, a flow chart 6120 illustrates a method for controlling offers that are provided at one or more POS terminals. Offers are provided to customers (step 6122) in accordance to the database of offers 6024 (FIG. 67). As described above with
15 reference to the table 6060 (FIG. 70), each offer includes an offer frequency that indicates the average percentage of times that the corresponding offer is to be provided. Thus, the database of offers 6024 indicates which offers are to be provided to customers, and also indicates the frequency with which the offers are to be provided.

For example, the POS terminal 6010 (FIG. 67) (or the server 6042 of FIG. 69, in a
20 networked embodiment) may generate a random number between 0 and 1 each time an offer is to be provided. Then, an offer would be selected in accordance with the random number and with the offer frequency illustrated in FIG. 70. A random number between 0.00 and 0.25 would correspond to the offer "A", while a random number between 0.26 and 0.50 would correspond to the offer "B", and so on for offers "C" and "D".

Alternatively, the POS terminal 6010 or server 6042 can provide a first offer during a first series of transactions, and then provide subsequent offers during consecutive series of transactions. The sizes of the series of transactions (the number of transactions in the series) would be selected in accordance with the offer frequencies 6076 of the table 6060 (FIG. 70).

- 5 For example, each of the offers specified by the table 6060 of FIG. 70 has an equal offer frequency (25%). Thus, the first offer "A" defined by the entry 6062 could be provided to customers during a first series of ten transactions, and the remaining three offers defined by the entries 6064, 6066 and 6068 could be provided during subsequent series of ten transactions each. Since there are four offers and each offer is provided to customers during
10 ten out of forty transactions, each offer has a frequency of 25%.

In another embodiment, each of a plurality of POS terminals may provide a different offer to customers. For example, a first POS terminal could provide a first offer during a series of one hundred transactions, and a second POS terminal could provide a second offer during a series of one hundred transactions. Accordingly, both the first offer and the second
15 offer would have a frequency of 50% ($100 / (100 + 100) = 0.50 = 50\%$).

Once offers are provided to customers at step 6122, the POS terminal 6010 or server 6042 calculates the performance rate of each offer (step 6124). The performance rate may be any measured and/or calculated quantity, such as an Acceptance Rate or a Profit Rate. Many other performance rates will be understood by those skilled in the art. The
20 performance rate of each offer may be calculated at predetermined periods, such as at the end of each day, or after predetermined numbers of offers have been provided to customers.

An Acceptance Rate may be calculated in accordance with the following:

$$\text{Acceptance Rate} = \text{Number of Times Accepted} / \text{Number of Times Provided}$$

The Number of Times Provided is the number of times a particular offer was provided to customers. Similarly, the Number of Times Accepted is the number of times that the provided offer was accepted by customers. Both the Number of Times Provided and the

- 5 Number of Times Accepted may be determined from data stored in the transaction database 6026 (FIG. 67). It is typically desirable to have a high Acceptance Rate, and ideally an offer will have an Acceptance Rate of 100%. However, it is likely that the Acceptance Rate of an offer will be less than 100%.

Referring to FIG. 73, a table 6140 illustrates an embodiment of the performance rate
10 database 6028 (FIG. 67). In this embodiment, the performance rate database 6028 is configured to store Acceptance Rate data as described above. The table 6140 includes entries 6142, 6144, 6146 and 6148, each of which describes an offer that has been provided to customers. It will be understood by those skilled in the art that the table 6140 may include any number of entries. Each of the entries 6142, 6144, 6146 and 6148 specifies (i)
15 an offer identifier 6150 for uniquely indicating the offer; (ii) a number of times accepted 6152; (iii) a number of times provided 6154; and (iv) an acceptance rate 6156 of the offer. The table 6140 may thus be used in determining which offers have the highest performance rate.

A Profit Rate is a performance rate of an offer that may be calculated in accordance
20 with the following:

$$\text{Profit Rate} = (\text{Revenue} - \text{Cost}) / \text{Number of Times Provided}$$

The Revenue is the amount of all income derived due to customers accepting the offer. The Cost is the expense incurred from customers accepting the offer. The Number of Times Provided is the number of times a particular offer was provided to customers.

Referring to FIG. 74, a table 6170 illustrates another embodiment of the performance rate database 6028 (FIG. 67). In this embodiment, the performance rate database 6028 is configured to store average profit per offer. The table 6170 includes entries 6172, 6174, 6176 and 6178, each of which describes an offer that has been provided to customers. It will be understood by those skilled in the art that the table 6170 may include any number of entries. Each of the entries 6172, 6174, 6176 and 6178 specifies (i) an offer identifier 6180 for uniquely indicating the offer; (ii) a number of times accepted 6182; (iii) a number of times provided 6184; (iv) an average revenue derived per accepted offer 6186; (v) an average profit derived per accepted offer 6188; and (vi) an average profit derived per offer 6190.

Those skilled in the art will understand that the number of times accepted 182, the number of times provided 6184 and the average revenue 6186 may be determined from data stored in the transaction database 6026 (FIG. 67). For example, referring again to the record 6090 of FIG. 71, at the POS terminal #7 the offers "A", "B" and "C" have each been offered once, as seen from the offer identifier 6108. The offers "B" and "C" have each been accepted once, as indicated by the offer accepted 6110 field. Similarly, the revenue derived for the offers "A", "B" and "C" is \$0.00, \$0.50 and \$0.78 respectively. An average revenue for each offer would be derived by dividing the total revenue from each offer by the number of times it was offered.

The average profit per accepted offer 6188 may be determined by subtracting the cost per offer (the cost 6074 of FIG. 70) from the average revenue 6186. Finally, the

average profit per offer 6190, which is the profit rate defined above, may be determined by multiplying the average profit per accepted offer 6188 by the acceptance rate of the offer.

As described above, the acceptance rate of the offer is determined by dividing the number of times accepted 6182 by the number of times provided 6184.

- 5 Referring again to FIG. 72, after the performance rates of the offers have been calculated (step 6124), the POS terminal 6010 or server 6042 determines modifications to the database of offers 6024 based on the performance rates (step 6126). Each offer may be provided at a different offer frequency, or even discontinued, in accordance with the calculated performance rate of that offer. As described below, offers with higher
- 10 performance rates continue to be provided to customers, and are typically provided at higher offer frequencies. Similarly, offers with low performance rates are typically provided at lower offer frequencies, or may even cease to be provided altogether.

- In one embodiment, only offers having performance rates greater than a predetermined threshold continue to be provided to customers. If one or more offers cease
- 15 to be provided, each offer frequency must be changed, as described below.

- FIG. 75 illustrates the selection of offers to discontinue. A table 6200 depicts data stored in an embodiment of the performance rate database 6028 (FIG. 67). For each offer, there is an offer identifier 6202 and an acceptance rate 6204. A threshold 6206 of 10% defines which of the offers in the table 6200 will continue to be provided. In particular, the
- 20 offers defined by entries 6208 and 6210 (the offers "A" and "B") have acceptance rates greater than 10%, and thus will continue to be provided. By contrast, the offers defined by entries 6212 and 6214 (the offers "C" and "D") have acceptance rates less than 10%, and thus will be discontinued.

A table 6216 depicts data stored in an embodiment of the database of offers 6024 (FIG. 67). As described above with respect to FIG. 70, each offer has an offer identifier 6218 and an offer frequency 6220. Since the offers "C" and "D" have been discontinued, the corresponding offer frequencies of those offers are 0%. The offer frequencies of the

5 offers "A" and "B", which continue to be offered, change accordingly. The offer frequencies may be changed so that they are equal to each other (50% each). Alternatively, the offer frequencies may be changed in accordance with their relation to one another, as follows:

$$10 \quad F_{\text{new}} = F_{\text{old}} / F_{\text{total}}$$

Where:

F_{new} is the new offer frequency

F_{old} is the offer frequency prior to being changed

15 F_{total} is the sum of the values of F_{old} for the offers that are not discontinued

In FIG. 75, the offer frequency "58%" of the offer "A" is calculated by from the offer frequencies of the offers that are not discontinued:

$$20 \quad 58\% = 20.4\% / (20.4\% + 14.8\%)$$

The offer frequency "42%" of the offer "B" is similarly calculated:

$$42\% = 14.8\% / (20.4\% + 14.8\%)$$

Those skilled in the art will understand that there are other methods for changing the offer frequencies of offers.

In another embodiment, a predetermined number of the highest-performing offers
5 continue to be provided to customers. The remaining offers, if any, are not provided. FIG.
76 illustrates the selection of offers to discontinue in this embodiment. A table 6240 depicts
data stored in another embodiment of the performance rate database 6028 (FIG. 67). For
each offer, there is an offer identifier 6242 and an average profit per order 6244. A
threshold 6246 of "three" defines the number of highest-performing offers in the table 6240
10 which will continue to be provided. In particular, the offers defined by entries 6248, 6250
and 6252 (the offers "A", "B" and "C") are the top three offers with respect to average profit
per order, and thus will continue to be provided. By contrast, the offer defined by entry
6254 (the offer "D") will be discontinued.

A table 6256 depicts data stored in an embodiment of the database of offers 6024
15 (FIG. 67). As described above, each offer has an offer identifier 6258 and an offer
frequency 6260. Since the offer "D" has been discontinued, the corresponding offer
frequency is 0%. The offer frequencies of the offers "A", "B" and "C", which continue to be
offered, change accordingly. The offer frequencies may be changed so that they are equal to
each other (33 1/3% each). Alternatively, the offer frequencies may be changed in
20 accordance with their relation to one another, in the manner described above.

Once offers have been discontinued, it may be desirable to make them available
again at some time in the future. For example, after an offer has been discontinued due to a
poor performance rate, conditions such as consumer tastes may change. Accordingly,
discontinued offers may continue to be maintained in the database of offers 6024 (FIG. 67),

and, after an offer has been discontinued for more than a predetermined amount of time, it may be advantageous to evaluate its performance rate once again. The discontinued offer may be granted a randomly-selected or predetermined offer frequency, allowing the corresponding performance rate to be evaluated.

- 5 In addition, in some situations, after offers are discontinued only one offer may continue to be offered. The performance rate of this offer is evaluated, and compared with the performance rate of the offer in prior time periods. If the performance rate declines below that of prior time periods, the offer may be discontinued and replaced. As a replacement, another (discontinued) offer may be granted a randomly-selected or
10 predetermined offer frequency, allowing the corresponding performance rate to be evaluated.

In some embodiments it may be desirable that the offer frequency of certain offers be unchanged, regardless of the performance rate calculated for those offers. For example, a high-value offer could have a very low offer frequency. The offer could then act as a prize
15 that few customers could receive. Accordingly, the cost of giving such a high-value offer in exchange for change due would be incurred rarely, yet could serve as advertising to prompt customers to frequent a business.

Referring to FIG. 77, a table 6300, similar to the table 6060 of FIG. 70, illustrates another embodiment of the database of offers 6024 (FIG. 67). The table 6300 includes
20 entries 6302, 6304, 6306 and 6308, each of which describes an offer to be provided to customers. Each of the entries 6302, 6304, 6306 and 6308 specifies (i) an offer identifier 6310 for uniquely indicating the offer; (ii) an offer description 6312 for describing the offer; (iii) a cost of the offer 6314 to the offeror; (iv) an offer frequency 6316 and (v) a fixed frequency indication 6318. The fixed frequency indication 6318 indicates whether the

corresponding offer frequency may be changed based on the performance rate of the offer, as described above. For example, the entry 6308 includes an offer frequency of 1%. Since this offer has a relatively high value (\$50 gift certificate), it is likely that it will be accepted often, perhaps always. However, the high cost (\$50) of the offer can make it unprofitable to
5 offer more frequently. Accordingly, the frequency of that offer is fixed at 1%.

Although the present invention has been described with respect to a preferred embodiment thereof, those skilled in the art will note that various substitutions may be made to those embodiments described herein without departing from the spirit and scope of the present invention.

WHAT IS CLAIMED IS:

1. A system comprising:
 - a lottery data processing system;
 - 5 a controller including a storage device storing merchandise information, said controller adapted to receive lottery information from said lottery data processing system;
 - at least one POS terminal connected to said controller, for performing merchandise transactions and lottery transactions in accordance with the received lottery information; and
 - 10 said POS terminal including a recorder for recording on a recording medium the merchandise and lottery information.
2. The system according to Claim 1, wherein said controller communicates in substantially real-time with said lottery data processing system.
- 15 3. The system according to Claim 1, wherein the storage device stores lottery information received from said lottery data processing system that includes randomly selected lottery ticket numbers.
- 20 4. The system according to Claim 2, wherein said POS terminal is adapted for input of customer-selected lottery numbers, said controller is adapted to transmit the customer-selected lottery numbers to said lottery data processing system, and said controller is adapted to receive from said lottery data processing system an encrypted authentication code and authorization to perform the lottery transaction.

5. The system according to Claim 1, wherein said controller is a store network server.
6. A method for performing a lottery transaction, comprising the steps of:
- 5 initiating the lottery transaction at a POS terminal adapted to perform both lottery transactions and merchandise transactions;
- communicating from the POS terminal to a POS controller, operatively connected to said POS terminal, that the lottery transaction has been initiated;
- establishing communication between the POS controller and a lottery data
- 10 processing system adapted to communicate with the POS controller;
- requesting lottery information be transmitted from the lottery data processing system to the POS controller;
- generating the lottery information in the lottery data processing system;
- transmitting the lottery information from the lottery data processing system to the
- 15 POS terminal via the POS controller; and
- outputting the lottery information on a recording medium by the POS terminal.
7. The method according to Claim 6, wherein said generating step comprises generating lottery information that includes randomly selected lottery numbers and an encrypted
- 20 authentication code.
8. The method according to Claim 6, wherein said outputting step comprises outputting a recording medium comprising a sales receipt having information relating to the lottery transaction and a merchandise transaction.

9. A method according to Claim 6, further comprising the steps of:
- inputting customer-selected lottery numbers to the POS terminal;
 - sending the customer-selected lottery numbers to the lottery data processing system;

5 and

wherein said generating step comprises generating lottery information that includes an authorization to complete the lottery transaction using the customer-selected lottery numbers and an encrypted authentication code related to the customer-selected lottery numbers.

10

10. A method according to Claim 6 further comprising the steps of:
- inputting into the POS terminal an indication of a percentage of a full price lottery ticket;

- sending the indication to the lottery data processing system; and

- 15 wherein said generating step comprises generating lottery information that includes an authorization for a fractional lottery ticket transaction.

11. A lottery data processing system comprising:

- a lottery controller including a CPU and a memory operatively connected to said

20 CPU;

- said lottery controller adapted to communicate with at least one remote controller that includes a storage device for storing merchandise information, said lottery controller adapted to receive a request for lottery information from said remote controller and to transmit, in response, the lottery information to said remote controller; and

said memory in said lottery controller containing a program, adapted to be executed by said CPU, for processing the request for the lottery information, generating the requested lottery information, and maintaining a database within said memory to store the requested lottery information.

5

12. The system according to Claim 11, wherein said program in said memory is adapted to generate lottery information that includes at least one group of randomly selected lottery numbers and an encrypted authentication code for transmittal to said remote controller.

10 13. The system according to Claim 11, wherein said lottery controller is adapted to receive from said remote controller at least one group of customer-selected lottery numbers.

14. The system according to Claim 13, wherein said program in said memory is adapted to generate lottery information that includes an authorization to complete a lottery
15 transaction related to the request for the lottery information and an encrypted authentication code related to the group of customer-selected lottery numbers for transmittal to said remote controller.

15. The system according to Claim 12, further comprising:
20 an IVRU operatively connected to said lottery controller and to a PSTN;
wherein said lottery controller is adapted to receive an alphanumeric code from said PSTN via said IVRU; and
said program in said memory is further adapted to

search said database within said memory to find a stored encrypted authentication code that matches the alphanumeric code, and if a match is found, decrypt the alphanumeric code, and send a first message to said PSTN via said IVRU, otherwise send a second message to said PSTN via said IVRU.

5

16. The system according to Claim 14, further comprising:

an IVRU operatively connected to said lottery network controller and to a PSTN;

wherein said lottery controller is adapted to receive an alphanumeric code from said PSTN via said IVRU; and

10 said program in said memory is further adapted to

search said database within said memory to find a stored encrypted authentication code that matches the alphanumeric code, and if a match is found, decrypt the alphanumeric code, and send a first message to said PSTN via said IVRU, otherwise send a second message to said PSTN via said IVRU.

15

17. The system according to Claim 15, wherein the first message includes information based on the decrypted alphanumeric code.

18. The system according to Claim 15, wherein the second message includes an
20 indication that no match was found.

19. The system according to Claim 15, wherein the first message comprises an indication as to whether the alphanumeric code is from a winning lottery ticket.

20. A method for processing a request for lottery information using a lottery controller including a CPU and a memory operatively connected to said CPU, wherein the memory contains a program, adapted to be executed by said CPU, for processing lottery information requests, said method comprising the steps of:

- 5 receiving a request for lottery information from a data processing system adapted to perform lottery ticket transactions and merchandise transactions;
- generating lottery information based on the request for lottery information;
- storing the lottery information in the memory; and
- transmitting the lottery information to the data processing system adapted to perform
- 10 lottery ticket transactions and merchandise transactions.

21. A method for processing a lottery ticket request, comprising the steps of:

- receiving a request for at least one lottery ticket;
- generating randomly selected numbers to be used for the lottery ticket;
- 15 generating an authentication code comprising the randomly selected numbers;
- encrypting the authentication code;
- storing the randomly selected numbers and the encrypted authentication code in a storage device; and
- outputting the randomly selected numbers and the encrypted authentication code.

20

22. A method according to Claim 21, wherein the request in said receiving step is for a fractional lottery ticket.

23. Computer executable process steps, stored on a computer readable medium, for processing lottery ticket transactions, comprising:

a step to receive a lottery ticket request;

a step to generate randomly selected lottery numbers;

5 a step to generate an authentication code based upon the randomly selected lottery numbers;

a step to encrypt the authentication code;

a step to store the randomly selected lottery numbers and the encrypted authentication code in a storage device; and

10 a step to output the randomly selected lottery numbers and the encrypted authentication code.

24. Computer executable process steps according to Claim 23, wherein the lottery ticket request in said step to receive is for a fractional lottery ticket.

15

25. A system for performing lottery ticket transactions and merchandise transactions, comprising:

a POS controller including a storage device storing merchandise information and lottery information;

20 said POS controller adapted to communicate with a lottery data processing system;

said POS controller further adapted to transmit a request for lottery information to said lottery data processing system and to receive, in response, the requested lottery information from said lottery data processing system;

- at least one POS terminal, operatively connected to said POS controller, for performing merchandise transactions and lottery transactions in accordance with the received lottery information; and
- a recorder connected to said POS terminal for issuing a receipt for the merchandise
- 5 and lottery transactions, said receipt comprising the lottery information from said lottery data processing system.

26. A method for performing lottery ticket transactions and merchandise transactions utilizing a POS terminal operatively connected to a POS controller including a storage
- 10 device storing merchandise information, comprising the steps of:
- initiating at the POS terminal a transaction for a plurality of items to be purchased, including a request to purchase at least one lottery ticket;
- inputting to the POS terminal a request for lottery ticket information;
- transmitting to the POS controller the request for lottery ticket information;
- 15 receiving at the POS terminal from the POS controller the requested lottery ticket information; and
- recording on a recording medium the lottery ticket information and the merchandise transaction.
- 20 27. A method according to Claim 26, further comprising the step of storing the requested lottery ticket information in the storage device of the POS controller.

28. A data processing system, comprising:

a POS controller including a CPU and a storage device operatively connected to said CPU;

said POS controller adapted to receive from at least one POS terminal, capable of performing lottery transactions and merchandise transactions, a request for lottery
5 information;

said POS controller further adapted to communicate the request for lottery information to a lottery data processing system that is capable of generating lottery information, and to receive, in response, the requested lottery information; and

said storage device in said POS controller containing a program, adapted to be
10 executed by said CPU, for processing the request for the lottery information from said POS terminal.

29. A method for processing lottery ticket requests using a POS controller including a CPU and a storage device operatively connected to said CPU and containing a program,
15 adapted to be executed by said CPU, for processing lottery ticket requests, comprising the steps of:

receiving a request for lottery information from a POS terminal performing lottery transactions and merchandise transactions;

transmitting the request to a lottery data processing system capable of generating
20 lottery information based on the request for lottery information;

receiving the lottery information from the lottery data processing system; and
sending the lottery information to the POS terminal.

30. A transaction processing device, comprising:

a POS terminal adapted to perform lottery transactions and merchandise transactions;
said POS terminal adapted to communicate with a POS controller;
said POS terminal adapted to transmit a request for lottery information to said POS
controller and to receive the requested lottery ticket information from said POS controller;
5 and
said POS terminal including a recorder for recording on a recording medium the
merchandise and lottery transactions.

31. A method for performing lottery ticket transactions and merchandise transactions
10 utilizing a POS terminal operatively connected to a POS controller that is adapted to
communicate with a lottery data processing system, comprising the steps of:
initiating at the POS terminal a transaction for a plurality of items to be purchased,
including a request to purchase at least one lottery ticket;
inputting to the POS terminal a request for lottery information;
15 receiving at the POS terminal lottery information including an encrypted
authentication code; and
recording on a recording medium the lottery information and the merchandise
transaction.

32. The method according to Claim 31, wherein said inputting step comprises inputting a
20 request for lottery information that includes randomly selected lottery numbers, and said
receiving step comprises receiving the randomly selected lottery numbers and the encrypted
authentication code.

33. The method according to Claim 31, wherein said inputting step comprises requesting that specific customer-selected lottery numbers be used as at least a part of the lottery information being requested.

5 34. The method according to Claim 31, wherein the request in said initiating step is for a fractional lottery ticket.

35. The method according to Claim 34, wherein the received lottery information includes an authorization to perform a fractional lottery ticket transaction.

10

36. A method of purchasing a lottery ticket, comprising:

requesting the purchase of at least one lottery ticket and at least one item of merchandise;

receiving a recording medium constituting the lottery ticket and containing

15 information concerning the purchase of the item of merchandise.

37. A method according to Claim 36, wherein the lottery ticket requested in said requesting step is a fractional lottery ticket.

20 38. A method of purchasing a lottery ticket comprising:

requesting the purchase of an item of merchandise; tendering an amount of money for the purchase, in excess of the purchase price;

directing that the amount of money for the purchase in excess of the purchase price be applied to the purchase of a fractional value lottery ticket; and

receiving a recording medium constituting the fractional value lottery ticket and containing information concerning the purchase of the item of merchandise.

39. A method for authenticating a lottery ticket using a lottery central controller
- 5 including a storage device, comprising the steps of:
- receiving first information related to the lottery ticket;
- determining whether the first information is equivalent to second information stored in the storage device, where the second information relates to a plurality of authorized lottery tickets;
- 10 if no equivalent is found, outputting a first message indicating that no match was found;
- if an equivalent is found, performing a decryption operation on the first information;
- and
- outputting a second message based on the decryption operation.
- 15
40. The method according to Claim 39, wherein the received first information comprises an encrypted authentication code.
41. The method according to Claim 39, wherein said receiving step comprises receiving
- 20 the first information via an IVRU operatively connected to a PSTN.
42. The method according to Claim 39, wherein said receiving step comprises receiving the first information from another data processing system.

43. The method according to Claim 39, wherein the second message comprises a report as to whether the lottery ticket is a winning lottery ticket.

44. The method according to Claim 40, wherein the decryption operation comprises
5 decrypting the encrypted authentication code, and the second message comprises information based on the decrypted authentication code.

45. A receipt, comprising a recording medium, recorded thereon lottery ticket information, merchandise transaction information and an encrypted authentication code.

10

46. The receipt according to Claim 45, wherein the lottery ticket information comprises a fractional lottery ticket.

47. A transaction processing system, comprising:

15 a POS terminal adapted to perform lottery ticket transactions and merchandise transactions;

an input device associated with said POS terminal for inputting information to said POS terminal related to at least one item to be purchased and an amount of money tendered to pay for the item;

20 said POS terminal adapted to calculate an amount of change based on the amount of money tendered to pay for the item;

said input device including an actuable member for causing said POS terminal to perform a lottery ticket transaction by applying the amount of change toward purchase of an amount of lottery tickets equal in value to the calculated amount of change; and

said POS terminal including a recorder for recording on a recording medium the merchandise transaction and the amount of lottery tickets purchased with the calculated amount of change.

5 48. The system according to Claim 47, where the amount of lottery tickets purchased includes a fractional lottery ticket.

49. A method for determining an upsell of a purchase at a point-of-sale terminal, comprising:

10 generating a purchase price of the purchase;

generating a rounded price;

calculating a round-up amount, the round-up amount being a difference between the purchase price and the rounded price;

generating a selection signal for indicating selection between the upsell and change;

15 and

exchanging the round-up amount for the upsell if the selection signal indicates selection of the upsell.

50. The method of claim 49, further comprising:

20 if the selection signal indicates selection of change,

identifying a second upsell,

generating a second selection signal for indicating selection between the second upsell and change, and

exchanging the round-up amount for the second upsell if the second selection signal indicates selection of the second upsell.

51. The method of claim 50, further comprising:
generating a random value; and wherein the step of identifying a second upsell is performed only if the random value is within a prescribed range of values.
- 5 52. The method of claim 49, further comprising:
printing a voucher.
53. The method of claim 52, further comprising:
maintaining an identifier database;
10 generating a unique identifier;
storing the unique identifier in the identifier database; and
printing the unique identifier on the voucher.
54. The method of claim 52, further comprising:
15 generating a date identifier in dependence on a date of the purchase; and
printing the date identifier on the voucher.
55. The method of claim 49, further comprising:
maintaining a database of offered upsells;
20 storing the round-up amount in the database of offered upsells;
storing the upsell in the database of offered upsells; and
storing the selection signal in the database of offered upsells.
56. The method of claim 55, further comprising:

storing a date of the purchase in the database of offered upsells.

57. The method of claim 49, wherein the upsell comprises a game entry.

5 58. The method of claim 57, further comprising:

maintaining a game database;

generating a unique identifier;

storing the unique identifier in the game database; and

storing the round-up amount in the game database.

10

59. The method of claim 49, further comprising:

if the selection signal indicates selection of the upsell, storing signals indicative of the upsell in a customer record, thereby associating the upsell with a customer.

15 60. The method of claim 59, further comprising:

storing signals indicative of a first customer identifier for identifying a first customer who donates the upsell; and

storing signals indicative of a second customer identifier for identifying a second customer who receives the upsell.

20

61. The method of claim 59, further comprising:

storing signals indicative of a first customer identifier for identifying a first customer who donates the upsell;

storing signals indicative of a plurality of customer identifiers for identifying a plurality of customers; and

selecting at least one of the plurality of customer identifiers, thereby selecting at least one customer to receive the upsell.

5

62. The method of claim 49, wherein the step of identifying the upsell comprises identifying a plurality of upsells in the database which correspond to the compared upsell price, and wherein the step of outputting comprises outputting signals indicative of at least one of the plurality of identified upsells.

10

63. The method of claim 62, further comprising:
generating a selection signal for indicating selection between at least one of the plurality of identified upsells and change.

15 64. The method of claim 62, further comprising:

sorting the plurality of identified upsells, thereby arranging a first upsell to be ordered before a second upsell.

65. The method of claim 64, wherein the step of outputting comprises outputting signals
20 indicative of the first upsell.

66. The method of claim 65, further comprising:
generating a selection signal for indicating selection between the identified upsell and change; and

outputting signals indicative of the second upsell if the selection signal does not indicate selection of the first upsell.

67. The method of claim 64, wherein the step of sorting comprises sorting the plurality
5 of identified upsells according to a cost of each identified upsell.

68. The method of claim 49, further comprising:
generating a purchase condition,
and wherein the step of maintaining a database comprises:
10 maintaining a database of at least one upsell price and a corresponding upsell and at least
one corresponding upsell condition,
and wherein the step of identifying comprises:
identifying at least one upsell in the database which corresponds to the compared upsell
price and the purchase condition.

15

69. The method of claim 49, wherein the step of generating a rounded price comprises
generating a rounded price in dependence on a whole number which is greater than the
purchase price.

20 70. The method of claim 69, wherein the step of generating a rounded price comprises
generating a rounded price in dependence on the smallest whole number which is greater
than the purchase price.

71. The method of claim 49, wherein the step of generating a rounded price comprises generating a rounded price in dependence on a multiple of $\frac{1}{4}$ which is greater than the purchase price.

5 72. The method of claim 49, further comprising:

storing a preferred-upsell signal indicative of an upsell for each of a plurality of customers.

73. The method of claim 72, wherein the step of generating the selection signal
10 comprises accessing the stored preferred-upsell signals, and generating the selection signal in dependence thereupon.

74. A method for determining an upsell of a purchase at a point-of-sale terminal, comprising:

15 maintaining a database of at least one upsell price and a corresponding upsell;
generating a purchase price of the purchase;
generating a rounded price;
calculating a round-up amount, the round-up amount being a difference between the purchase price and the rounded price;
20 comparing the calculated round-up amount with at least one of the upsell prices in the database; and
if the calculated round-up amount corresponds to a compared upsell price,
identifying at least one upsell in the database which corresponds to the compared upsell price.

75. The method of claim 74, further comprising:

generating a selection signal for indicating selection between the identified upsell and change.

5

76. The method of claim 75, wherein the database includes a plurality of upsell prices and corresponding upsells, the method further comprising:

if the selection signal indicates selection of change, identifying a second upsell in the database which corresponds to the compared upsell.

10

77. The method of claim 74, wherein the step of generating a selection signal comprises:

generating a selection signal for indicating selection between the identified upsell, change and a second upsell,
and the method further comprising:

15 if the selection signal indicates selection of the second upsell, determining a second upsell price corresponding to the second upsell.

78. The method of claim 75, further comprising:

printing a voucher.

20

79. The method of claim 78, further comprising:

printing an identifier on the voucher.

80. The method of claim 78, further comprising:

maintaining an identifier database;
generating a unique identifier;
storing the unique identifier in the identifier database; and
printing the unique identifier on the voucher.

5

81. The method of claim 78, further comprising:
generating a date identifier in dependence on a date of the purchase; and
printing the date identifier on the voucher.

10 82. The method of claim 75, further comprising:
maintaining a database of offered upsells;
storing the round-up amount in the database of offered upsells;
storing the identified upsell in the database of offered upsells; and
storing the selection signal in the database of offered upsells.

15

83. The method of claim 82, further comprising:
storing a date of the purchase in the database of offered upsells.

84. The method of claim 75, wherein the upsell comprises a game entry.

20

85. The method of claim 84, further comprising:
maintaining a game database;
generating a unique identifier;
storing the unique identifier in the game database; and

storing the round-up amount in the game database.

86. The method of claim 75, further comprising:

if the selection signal indicates selection of the identified upsell, storing signals
5 indicative of the identified upsell in a customer record, thereby associating the identified
upsell with a customer.

87. The method of claim 86, further comprising:

storing signals indicative of a first customer identifier for identifying a first customer
10 who donates the identified upsell; and
storing signals indicative of a second customer identifier for identifying a second customer
who receives the donated upsell.

88. The method of claim 86, further comprising:

15 storing signals indicative of a first customer identifier for identifying a first customer
who donates the identified upsell;
storing signals indicative of a plurality of customer identifiers for identifying a plurality of
customers; and
selecting at least one of the plurality of customer identifiers, thereby selecting at least one
20 customer who receives the donated upsell.

89. The method of claim 75, further comprising:

storing a preferred-upsell signal indicative of an upsell for each of a plurality of
customers.

90. The method of claim 89, wherein the step of generating the selection signal comprises accessing the stored preferred-upsell signals, and generating the selection signal in dependence thereupon.

5

91. The method of claim 74, wherein the step of identifying the upsell comprises identifying a plurality of upsells in the database which correspond to the compared upsell price.

10 92. The method of claim 91, further comprising:
generating a selection signal for indicating selection between at least one of the plurality of identified upsells and change.

93. The method of claim 91, further comprising:
15 sorting the plurality of identified upsells, thereby arranging a first upsell to be ordered before a second upsell.

94. The method of claim 93, wherein the step of sorting comprises sorting the plurality of identified upsells according to a cost of each identified upsell.

20

95. The method of claim 74, further comprising:
generating a purchase condition,
and wherein the step of maintaining a database comprises:

maintaining a database of at least one upsell price and a corresponding upsell and at least one corresponding upsell condition,

and wherein the step of identifying comprises:

identifying at least one upsell in the database which corresponds to the compared upsell

5 price and the purchase condition.

96. The method of claim 74, wherein the step of generating a rounded price comprises generating a rounded price in dependence on a whole number which is greater than the purchase price.

10

97. The method of claim 96, wherein the step of generating a rounded price comprises generating a rounded price in dependence on the smallest whole number which is greater than the purchase price.

15 98. The method of claim 74, wherein the step of generating a rounded price comprises generating a rounded price in dependence on a multiple of $\frac{1}{4}$ which is greater than the purchase price.

99. An apparatus for determining an upsell of a purchase, comprising:

20 a storage device; and

a processor connected to the storage device,

the storage device storing

a database of at least one upsell price and a corresponding upsell, and

a program for controlling the processor; and

- the processor operative with the program to
generate a purchase price of the purchase,
generate a rounded price,
calculate a round-up amount, the round-up amount being a difference between the purchase
5 price and the rounded price,
compare the calculated round-up amount with at least one of the upsell prices in the
database, and
if the calculated round-up amount corresponds to a compared upsell price, identify at least
one upsell in the
10 database which corresponds to the compared upsell price.

100. The apparatus of claim 99, wherein the processor is further operative with the
program to generate a selection signal for indicating selection between the identified upsell
and change.

15

101. The apparatus of claim 100, wherein the database includes a plurality of upsell prices
and corresponding upsells, and wherein the processor is further operative with the program
to identify a second upsell in the database which corresponds to the compared upsell if the
selection signal indicates selection of change.

20

102. The apparatus of claim 99, wherein the processor is further operative with the
program to:

generate a selection signal for indicating selection between the identified upsell,
change and a second upsell, and

if the selection signal indicates selection of the second upsell, determine a second upsell price corresponding to the second upsell.

103. The apparatus of claim 100, further comprising:

5 a printer connected to the processor for printing a voucher.

104. The apparatus of claim 103, wherein the processor is further operative with the program to drive the printer to print an identifier on the voucher.

10 105. The apparatus of claim 103, wherein the storage device further stores an identifier database; and

wherein the processor is further operative with the program to:

generate a unique identifier;

store the unique identifier in the identifier database; and

15 drive the printer to print the unique identifier on the voucher.

106. The apparatus of claim 103, wherein the processor is further operative with the program to:

generate a date identifier in dependence on a date of the purchase; and

20 drive the printer to print the date identifier on the voucher.

107. The apparatus of claim 100, wherein the storage device further stores a database of offered upsells;

and wherein the processor is further operative with the program to:

store the round-up amount in the database of offered upsells;
store the identified upsell in the database of offered upsells; and
store the selection signal in the database of offered upsells.

5 108. The apparatus of claim 107, wherein the processor is further operative with the program to store a date of the purchase in the database of offered upsells.

109. The apparatus of claim 100, wherein the upsell comprises a game entry.

10 110. The apparatus of claim 109, wherein the storage device further stores a game database, and

wherein the processor is further operative with the program to:

generate a unique identifier;

store the unique identifier in the game database; and

15 store the round-up amount in the game database.

111. The apparatus of claim 100, wherein the storage device further stores a customer record, and wherein the processor is further operative with the program to:

if the selection signal indicates selection of the identified upsell, store signals

20 indicative of the identified upsell in the customer record, thereby associating the identified upsell with a customer.

112. The apparatus of claim 111, wherein the storage device further stores:

signals indicative of a first customer identifier for identifying a first customer who donates the identified upsell; and

signals indicative of a second customer identifier for identifying a second customer who receives the donated upsell.

5

113. The apparatus of claim 111, wherein the storage device further stores:

signals indicative of a first customer identifier for identifying a first customer who donates the identified upsell; and

signals indicative of a plurality of customer identifiers for identifying a plurality of

10 customers;

and wherein the processor is further operative with the program to select at least one of the plurality of customer identifiers, thereby selecting at least one customer who receives the donated upsell.

15 114. The apparatus of claim 100, wherein the storage device further stores a preferred-
upsell signal indicative of an upsell for each of a plurality of customers.

115. The apparatus of claim 114, wherein the processor is further operative with the
program to access the stored preferred-upsell signals, and generate the selection signal in
20 dependence thereupon.

116. The apparatus of claim 100, wherein the processor is further operative with the
program to identify a plurality of upsells in the database which correspond to the compared
upsell price.

117. The apparatus of claim 116, wherein the processor is further operative with the program to:

generate a selection signal for indicating selection between at least one of the
5 plurality of identified upsells and change.

118. The apparatus of claim 116, wherein the processor is further operative with the program to:

sort the plurality of identified upsells, thereby arranging a first upsell to be ordered before a
10 second upsell.

119. The apparatus of claim 118, wherein the processor is further operative with the program to sort the plurality of identified upsells according to a cost of each identified upsell.

15

120. The apparatus of claim 99, wherein the storage device further stores:

a database of at least one upsell price and a corresponding upsell and at least one corresponding upsell condition;

and wherein the processor is further operative with the program to

20 generate a purchase condition, and

identify at least one upsell in the database which corresponds to the compared upsell price and the purchase condition.

121. The apparatus of claim 99, wherein the processor is further operative with the program to generate a rounded price in dependence on a whole number which is greater than the purchase price.

5 122. The apparatus of claim 121, wherein the processor is further operative with the program to generate a rounded price in dependence on the smallest whole number which is greater than the purchase price.

123. The apparatus of claim 99, wherein the processor is further operative with the
10 program to generate a rounded price in dependence on a multiple of $\frac{1}{4}$ which is greater than the purchase price.

124. A method for determining an upsell of a purchase at a point-of-sale terminal, the terminal storing a required payment amount, comprising:

- 15 maintaining a database of at least one upsell price and a corresponding upsell;
generating a purchase price of the purchase;
setting the required payment amount to be equal to the purchase price;
generating a rounded price;
calculating a round-up amount, the round-up amount being a difference between the
20 purchase price and the rounded price;
comparing the calculated round-up amount with at least one of the upsell prices in the database; and
if the calculated round-up amount corresponds to a compared upsell price,

identifying at least one upsell in the database which corresponds to the
compared upsell price, and
outputting signals indicative of the identified upsell.

5 125. The method of claim 124, further comprising:

generating a selection signal for indicating selection between the identified upsell
and change; and
setting the required payment amount to be equal to the rounded price if the selection signal
indicates selection of the identified upsell.

10

126. The method of claim 125, wherein the database includes a plurality of upsell prices
and corresponding upsells, the method further comprising:

if the selection signal indicates selection of change,

identifying a second upsell in the database which corresponds to the

15 compared upsell price, and

outputting signals indicative of the identified second upsell.

127. The method of claim 126, further comprising:

generating a random value; and wherein the step of outputting signals indicative of

20 the identified second upsell is performed only if the random value is within a prescribed
range of values.

128. The method of claim 124, wherein the step of generating a selection signal
comprises:

generating a selection signal for indicating selection between the identified upsell, change and a second upsell,

and the method further comprising:

if the selection signal indicates selection of the second upsell,

5 determining a second upsell price corresponding to the second upsell, and

setting the required payment amount to be equal to the rounded price if the calculated round-up amount corresponds to the second upsell price.

129. The method of claim 125, further comprising:

10 printing a voucher.

130. The method of claim 129, further comprising:

printing an identifier on the voucher.

15 131. The method of claim 129, further comprising:

maintaining an identifier database;

generating a unique identifier;

storing the unique identifier in the identifier database; and

printing the unique identifier on the voucher.

20

132. The method of claim 129, further comprising:

generating a date identifier in dependence on a date of the purchase; and

printing the date identifier on the voucher.

133. The method of claim 125, further comprising:
- maintaining a database of offered upsells;
 - storing the round-up amount in the database of offered upsells;
 - storing the identified upsell in the database of offered upsells; and
 - 5 storing the selection signal in the database of offered upsells.
134. The method of claim 133, further comprising:
- storing a date of the purchase in the database of offered upsells.
- 10 135. The method of claim 125, wherein the upsell comprises a game entry.
136. The method of claim 135, further comprising:
- maintaining a game database;
 - generating a unique identifier;
 - 15 storing the unique identifier in the game database; and
 - storing the round-up amount in the game database.
137. The method of claim 125, further comprising:
- if the selection signal indicates selection of the identified upsell, storing signals
 - 20 indicative of the identified upsell in a customer record, thereby associating the identified upsell with a customer.
138. The method of claim 137, further comprising:

storing signals indicative of a first customer identifier for identifying a first customer who donates the identified upsell; and
storing signals indicative of a second customer identifier for identifying a second customer who receives the donated upsell.

5

139. The method of claim 137, further comprising:

storing signals indicative of a first customer identifier for identifying a first customer who donates the identified upsell;

storing signals indicative of a plurality of customer identifiers for identifying a plurality of
10 customers; and

selecting at least one of the plurality of customer identifiers, thereby selecting at least one customer who receives the donated upsell.

140. The method of claim 125, further comprising:

15 storing a preferred-upsell signal indicative of an upsell for each of a plurality of customers.

141. The method of claim 140, wherein the step of generating the selection signal comprises accessing the stored preferred-upsell signals, and generating the selection signal
20 in dependence thereupon.

142. The method of claim 124, wherein the step of identifying the upsell comprises identifying a plurality of upsells in the database which correspond to the compared upsell

price, and wherein the step of outputting comprises outputting signals indicative of at least one of the plurality of identified upsells.

143. The method of claim 142, further comprising:

5 generating a selection signal for indicating selection between at least one of the plurality of identified upsells and change.

144. The method of claim 142, further comprising:

 sorting the plurality of identified upsells, thereby arranging a first upsell to be ordered
10 before a second upsell.

145. The method of claim 144, wherein the step of outputting comprises outputting signals indicative of the first upsell.

15 146. The method of claim 145, further comprising:

 generating a selection signal for indicating selection between the identified upsell and change; and

 outputting signals indicative of the second upsell if the selection signal does not indicate selection of the first upsell.

20

147. The method of claim 144, wherein the step of sorting comprises sorting the plurality of identified upsells according to a cost of each identified upsell.

148. The method of claim 124, further comprising:

generating a purchase condition,

and wherein the step of maintaining a database comprises:

maintaining a database of at least one upsell price and a corresponding upsell and at least one corresponding upsell condition,

5 and wherein the step of identifying comprises:

identifying at least one upsell in the database which corresponds to the compared upsell price and the purchase condition.

149. The method of claim 124, wherein the step of generating a rounded price comprises

10 generating a rounded price in dependence on a whole number which is greater than the purchase price.

150. The method of claim 149, wherein the step of generating a rounded price comprises generating a rounded price in dependence on the smallest whole number which is greater

15 than the purchase price.

151. The method of claim 124, wherein the step of generating a rounded price comprises generating a rounded price in dependence on a multiple of $\frac{1}{4}$ which is greater than the purchase price.

20

152. An apparatus for determining an upsell of a purchase, comprising:

a storage device; and

a processor connected to the storage device,

the storage device storing

- a required payment amount,
- a database of at least one upsell price and a corresponding upsell, and
- a program for controlling the processor; and
- the processor operative with the program to
- 5 generate a purchase price of the purchase,
- set the required payment amount to be equal to the purchase price,
- generate a rounded price,
- calculate a round-up amount, the round-up amount being a difference between the purchase price and the rounded price,
- 10 compare the calculated round-up amount with at least one of the upsell prices in the database, and
- if the calculated round-up amount corresponds to a compared upsell price,
- identify at least one upsell in the database which corresponds to the compared upsell price,
- and
- 15 output signals indicative of the identified upsell.

153. The apparatus of claim 152, wherein the processor is further operative with the program to generate a selection signal for indicating selection between the identified upsell and change.

20

154. The apparatus of claim 153, wherein the database includes a plurality of upsell prices and corresponding upsells, and wherein the processor is further operative with the program to identify a second upsell in the database which corresponds to the compared upsell if the selection signal indicates selection of change.

155. The apparatus of claim 152, wherein the processor is further operative with the program to:

- generate a selection signal for indicating selection between the identified upsell,
- 5 change and a second upsell, and
- if the selection signal indicates selection of the second upsell, determine a second upsell price corresponding to the second upsell.

156. The apparatus of claim 153, further comprising:

- 10 a printer connected to the processor for printing a voucher.

157. The apparatus of claim 156, wherein the processor is further operative with the program to drive the printer to print an identifier on the voucher.

15 158. The apparatus of claim 156, wherein the storage device further stores an identifier database; and

wherein the processor is further operative with the program to:

generate a unique identifier;

store the unique identifier in the identifier database; and

- 20 drive the printer to print the unique identifier on the voucher.

159. The apparatus of claim 156, wherein the processor is further operative with the program to:

generate a date identifier in dependence on a date of the purchase; and

drive the printer to print the date identifier on the voucher.

160. The apparatus of claim 153, wherein the storage device further stores a database of offered upsells;

5 and wherein the processor is further operative with the program to:

store the round-up amount in the database of offered upsells;

store the identified upsell in the database of offered upsells; and

store the selection signal in the database of offered upsells.

10 161. The apparatus of claim 160, wherein the processor is further operative with the program to store a date of the purchase in the database of offered upsells.

162. The apparatus of claim 153, wherein the upsell comprises a game entry.

15 163. The apparatus of claim 162, wherein the storage device further stores a game database, and

wherein the processor is further operative with the program to:

generate a unique identifier;

store the unique identifier in the game database; and

20 store the round-up amount in the game database.

164. The apparatus of claim 153, wherein the storage device further stores a customer record, and wherein the processor is further operative with the program to:

if the selection signal indicates selection of the identified upsell, store signals indicative of the identified upsell in the customer record, thereby associating the identified upsell with a customer.

- 5 165. The apparatus of claim 164, wherein the storage device further stores:
signals indicative of a first customer identifier for identifying a first customer who donates
the identified upsell; and
signals indicative of a second customer identifier for identifying a second customer who
receives the donated upsell.

10

166. The apparatus of claim 164, wherein the storage device further stores:
signals indicative of a first customer identifier for identifying a first customer who
donates the identified upsell; and
signals indicative of a plurality of customer identifiers for identifying a plurality of
15 customers;
and wherein the processor is further operative with the program to select at least one of the
plurality of customer identifiers, thereby selecting at least one customer who receives the
donated upsell.

- 20 167. The apparatus of claim 153, wherein the storage device further stores a preferred-
upsell signal indicative of an upsell for each of a plurality of customers.

168. The apparatus of claim 167, wherein the processor is further operative with the program to access the stored preferred-upsell signals, and generate the selection signal in dependence thereupon.

5 169. The apparatus of claim 152, wherein the processor is further operative with the program to identify a plurality of upsells in the database which correspond to the compared upsell price.

170. The apparatus of claim 169, wherein the processor is further operative with the
10 program to:
generate a selection signal for indicating selection between at least one of the plurality of identified upsells and change.

171. The apparatus of claim 169, wherein the processor is further operative with the
15 program to:
sort the plurality of identified upsells, thereby arranging a first upsell to be ordered before a second upsell.

172. The apparatus of claim 171, wherein the processor is further operative with the
20 program to sort the plurality of identified upsells according to a cost of each identified upsell.

173. The apparatus of claim 152, wherein the storage device further stores:

a database of at least one upsell price and a corresponding upsell and at least one corresponding upsell condition;

and wherein the processor is further operative with the program to generate a purchase condition, and

- 5 identify at least one upsell in the database which corresponds to the compared upsell price and the purchase condition.

174. The apparatus of claim 152, wherein the processor is further operative with the program to generate a rounded price in dependence on a whole number which is greater than
10 the purchase price.

175. The apparatus of claim 174, wherein the processor is further operative with the program to generate a rounded price in dependence on the smallest whole number which is greater than the purchase price.

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176. The apparatus of claim 152, wherein the processor is further operative with the program to generate a rounded price in dependence on a multiple of $\frac{1}{4}$ which is greater than the purchase price.

- 20 177. A method for determining a second product in dependence on a purchase, the purchase including a first product, the terminal storing a required payment amount, comprising:
maintaining a database of at least one upsell price, a corresponding item purchased and a corresponding second product;

- generating a purchase price of the purchase;
- setting the required payment amount to be equal to the purchase price;
- generating a rounded price;
- calculating a round-up amount, the round-up amount being a difference between the
- 5 purchase price and the rounded price;
- comparing the calculated round-up amount with at least one of the upsell prices in the database; and
- if the calculated round-up amount corresponds to a compared upsell price,
- identifying the item purchased and second product which corresponds to the
- 10 compared upsell price in the database,
- if the first product corresponds to the identified item purchased, outputting a signal indicative of the second product,
- generating a selection signal for indicating selection between the second product and the first product; and
- 15 setting the required payment amount to be equal to the rounded price if the selection signal indicates selection of the second product.
178. An apparatus for determining a second product in dependence on a purchase, the purchase including a first product, comprising:
- 20 a storage device; and
- a processor connected to the storage device,
- the storage device storing
- a required payment amount,
- a database of at least one upsell price and a corresponding upsell, and

- a program for controlling the processor; and
- the processor operative with the program to
- generate a purchase price of the purchase,
- set the required payment amount to be equal to the purchase price,
- 5 generate a rounded price,
- calculate a round-up amount, the round-up amount being a difference between the purchase price and the rounded price,
- compare the calculated round-up amount with at least one of the upsell prices in the database, and
- 10 if the calculated round-up amount corresponds to a compared upsell price,
- identify the item purchased and second product which corresponds to the compared upsell price in the database,
- if the first product corresponds to the identified item purchased, outputting a signal indicative of the second product,
- 15 generate a selection signal for indicating selection between the second product and the first product, and
- set the required payment amount to be equal to the rounded price if the selection signal indicates selection of the second product.
- 20 179. A method for determining a second product in dependence on a purchase, the purchase including a first product, the terminal storing a required payment amount, comprising:
- maintaining a database of at least one upsell price, a corresponding item purchased and a corresponding second product;

- generating a purchase price of the purchase;
- setting the required payment amount to be equal to the purchase price;
- generating a rounded price;
- calculating a round-up amount, the round-up amount being a difference between the
- 5 purchase price and the rounded price;
- comparing the calculated round-up amount with at least one of the upsell prices in
- the database; and
- if the calculated round-up amount corresponds to a compared upsell price,
- identifying the item purchased and second product which corresponds to the
- 10 compared upsell price in the database,
- if the first product corresponds to the identified item purchased, outputting a signal
- indicative of the second product,
- generating a selection signal for indicating selection between the second product and
- change; and
- 15 setting the required payment amount to be equal to the rounded price if the selection
- signal indicates selection of the second product.

- 180. An apparatus for determining a second product in dependence on a purchase, the
- purchase including a first product, comprising:
- 20 a storage device; and
- a processor connected to the storage device,
- the storage device storing
- a required payment amount,
- a database of at least one upsell price and a corresponding upsell, and

- a program for controlling the processor; and
- the processor operative with the program to
- generate a purchase price of the purchase,
- set the required payment amount to be equal to the purchase price,
- 5 generate a rounded price;
- calculate a round-up amount, the round-up amount being a difference between the purchase price and the rounded price,
- compare the calculated round-up amount with at least one of the upsell prices in the database, and
- 10 if the calculated round-up amount corresponds to a compared upsell price,
- identify the item purchased and second product which corresponds to the compared upsell price in the database,
- if the first product corresponds to the identified item purchased, outputting a signal indicative of the second product,
- 15 generate a selection signal for indicating selection between the second product and change, and
- set the required payment amount to be equal to the rounded price if the selection signal indicates selection of the second product.
- 20 181. A method for offering an upsell of a purchase at a point-of-sale terminal, comprising:
- generating a purchase price of the purchase;
- setting a required payment amount to be equal to the purchase price;
- generating a rounded price;

calculating a round-up amount, the round-up amount being a difference between the purchase price and the rounded price;

generating a selection signal for indicating selection between the upsell and change;

and

- 5 setting the required payment amount to be equal to the rounded price if the selection signal indicates selection of the upsell.

182. The method of claim 181, further comprising:

providing a voucher if the selection signal indicates selection of the upsell.

10

183. The method of claim 182, further comprising:

printing an identifier on the voucher.

184. The method of claim 182, further comprising:

- 15 maintaining an identifier database;

generating a unique identifier;

storing the unique identifier in the identifier database; and

printing the unique identifier on the voucher.

- 20 185. The method of claim 182, further comprising:

generating a date identifier in dependence on a date of the purchase; and

printing the date identifier on the voucher.

186. The method of claim 181, further comprising:

maintaining a database of offered upsells;
storing the round-up amount in the database of offered upsells;
storing the identified upsell in the database of offered upsells; and
storing the selection signal in the database of offered upsells.

5

187. The method of claim 186, further comprising:

storing a date of the purchase in the database of offered upsells.

188. The method of claim 181, wherein the upsell comprises a game entry.

10

189. The method of claim 188, further comprising:

maintaining a game database;

generating a unique identifier;

storing the unique identifier in the game database; and

15 storing the round-up amount in the game database.

190. The method of claim 181, further comprising:

if the selection signal indicates selection of the identified upsell, storing signals
indicative of the identified upsell in a customer record, thereby associating the identified
20 upsell with a customer.

191. The method of claim 190, further comprising:

storing signals indicative of a first customer identifier for identifying a first customer
who donates the identified upsell; and

160

storing signals indicative of a second customer identifier for identifying a second customer who receives the donated upsell.

192. The method of claim 190, further comprising:

- 5 storing signals indicative of a first customer identifier for identifying a first customer who donates the identified upsell;
- storing signals indicative of a plurality of customer identifiers for identifying a plurality of customers; and
- selecting at least one of the plurality of customer identifiers, thereby selecting at least one
- 10 customer who receives the donated upsell.

193. The method of claim 181, further comprising:

storing a preferred-upsell signal indicative of an upsell for each of a plurality of customers.

15

194. The method of claim 193, wherein the step of generating the selection signal comprises accessing the stored preferred-upsell signals, and generating the selection signal in dependence thereupon.

- 20 195. The method of claim 181, wherein the step of generating a rounded price comprises generating a rounded price in dependence on a whole number which is greater than the purchase price.

196. The method of claim 195, wherein the step of generating a rounded price comprises generating a rounded price in dependence on the smallest whole number which is greater than the purchase price.

5 197. The method of claim 181, wherein the step of generating a rounded price comprises generating a rounded price in dependence on a multiple of $\frac{1}{4}$ which is greater than the purchase price.

198. An apparatus for offering an upsell of a purchase, comprising:

10 a storage device; and

a processor connected to the storage device,

the storage device storing

a required payment amount, and

a program for controlling the processor; and

15 the processor operative with the program to

generate a purchase price of the purchase,

set a required payment amount to be equal to the purchase price,

generate a rounded price,

calculate a round-up amount, the round-up amount being a difference between the purchase

20 price and the rounded price,

generate a selection signal for indicating selection between the upsell and change, and

set the required payment amount to be equal to the rounded price if the selection signal

indicates selection of the upsell.

199. The apparatus of claim 198, wherein the processor is further operative with the program to generate a selection signal for indicating selection between the identified upsell and change.

5 200. The apparatus of claim 199, further comprising:
a printer connected to the processor for printing a voucher.

201. The apparatus of claim 200, wherein the processor is further operative with the program to drive the printer to print an identifier on the voucher.

10

202. The apparatus of claim 200, wherein the storage device further stores an identifier database; and

wherein the processor is further operative with the program to:
generate a unique identifier;

15 store the unique identifier in the identifier database; and
drive the printer to print the unique identifier on the voucher.

203. The apparatus of claim 199, wherein the processor is further operative with the program to:

20 generate a date identifier in dependence on a date of the purchase; and
drive the printer to print the date identifier on the voucher.

204. The apparatus of claim 199, wherein the storage device further stores a database of offered upsells;

and wherein the processor is further operative with the program to:

store the round-up amount in the database of offered upsells;

store the identified upsell in the database of offered upsells; and

store the selection signal in the database of offered upsells.

5

205. The apparatus of claim 204, wherein the processor is further operative with the program to store a date of the purchase in the database of offered upsells.

206. The apparatus of claim 199, wherein the upsell comprises a game entry.

10

207. The apparatus of claim 206, wherein the storage device further stores a game database, and

wherein the processor is further operative with the program to:

generate a unique identifier;

15 store the unique identifier in the game database; and

store the round-up amount in the game database.

208. The apparatus of claim 199, wherein the storage device further stores a customer record, and wherein the processor is further operative with the program to:

20 if the selection signal indicates selection of the identified upsell, store signals indicative of the identified upsell in the customer record, thereby associating the identified upsell with a customer.

209. The apparatus of claim 208, wherein the storage device further stores:

signals indicative of a first customer identifier for identifying a first customer who donates the identified upsell; and

signals indicative of a second customer identifier for identifying a second customer who receives the donated upsell.

5

210. The apparatus of claim 208, wherein the storage device further stores:

signals indicative of a first customer identifier for identifying a first customer who donates the identified upsell; and

signals indicative of a plurality of customer identifiers for identifying a plurality of

10 customers;

and wherein the processor is further operative with the program to select at least one of the plurality of customer identifiers, thereby selecting at least one customer who receives the donated upsell.

15 211. The apparatus of claim 199, wherein the storage device further stores a preferred-upsell signal indicative of an upsell for each of a plurality of customers.

212. The apparatus of claim 211, wherein the processor is further operative with the program to access the stored preferred-upsell signals, and generate the selection signal in

20 dependence thereupon.

213. The apparatus of claim 198, wherein the processor is further operative with the program to generate a rounded price in dependence on a whole number which is greater than the purchase price.

214. The apparatus of claim 213, wherein the processor is further operative with the program to generate a rounded price in dependence on the smallest whole number which is greater than the purchase price.

5

215. The apparatus of claim 198, wherein the processor is further operative with the program to generate a rounded price in dependence on a multiple of $\frac{1}{4}$ which is greater than the purchase price.

10 216. A method for determining an upsell of a purchase at a point-of-sale terminal, comprising:
generating a purchase price of the purchase;
generating a rounded price;
calculating a round-up amount, the round-up amount being a difference between the
15 purchase price and the rounded price;
generating a selection signal for indicating selection between the upsell and change; and
printing indicia indicative of the round-up amount if the selection signal indicates selection of the upsell.

20 217. An apparatus for determining an upsell of a purchase, comprising:
a storage device;
a processor connected to the storage device; and
a printer connected to the processor,
the storage device storing

- a program for controlling the processor;
- the processor operative with the program to
- generate a purchase price of the purchase,
- generate a rounded price,
- 5 calculate a round-up amount, the round-up amount being a difference between the purchase price and the rounded price, and
- generate a selection signal for indicating selection between the upsell and change; and
- the printer for printing indicia indicative of the round-up amount if the selection signal indicates selection of the upsell.

10

218. A method for determining an upsell of a purchase at a point-of-sale terminal, the terminal storing a required payment amount, comprising:
- generating a purchase price of the purchase;
- generating a rounded price;
- 15 calculating a round-up amount, the round-up amount being a difference between the purchase price and the rounded price;
- setting the required payment amount to be equal to the rounded price;
- providing an upsell in exchange for the round-up amount.

- 20 219. A method for determining an upsell of a purchase, comprising:
- maintaining a database of at least one upsell price and a corresponding upsell;
- receiving a purchase price of the purchase;
- generating a rounded price;

calculating a round-up amount, the round-up amount being a difference between the purchase price and the rounded price;
comparing the calculated round-up amount with at least one of the upsell prices in the database; and

- 5 if the calculated round-up amount corresponds to a compared upsell price,
 identifying at least one upsell in the database which corresponds to the compared upsell price, and
 outputting signals indicative of the identified upsell.

- 10 220. The method of claim 219, further comprising:
 generating a selection signal for indicating selection between the identified upsell and change; and
 transmitting the rounded price if the selection signal indicates selection of the identified upsell.

- 15
221. The method of claim 220, wherein the step transmitting the rounded price comprises transmitting the rounded price to a register if the selection signal indicates selection of the identified upsell.

- 20 222. The method of claim 219, wherein the step of receiving the purchase price comprises receiving the purchase price of the purchase from a register.

223. An apparatus for determining an upsell of a purchase, comprising:
a storage device; and

a processor connected to the storage device;

the storage device storing

a database of at least one upsell price and a corresponding upsell, and

a program for controlling the processor;

- 5 the processor operative with the program to
receive a purchase price of the purchase,
generate a rounded price,
calculate a round-up amount, the round-up amount being a difference between the purchase
price and the rounded price,
- 10 comparing the calculated round-up amount with at least one of the upsell prices in the
database, and
if the calculated round-up amount corresponds to a compared upsell price,
identify at least one upsell in the database which corresponds to the
compared upsell price, and
- 15 output signals indicative of the identified upsell.

224. The apparatus of claim 223, wherein the processor is further operative with the
program to

generate a selection signal for indicating selection between the identified upsell and

20 change, and

transmit the rounded price if the selection signal indicates selection of the identified upsell.

225. The apparatus of claim 224, wherein the processor is further operative with the program to transmit the rounded price to a register if the selection signal indicates selection of the identified upsell.

- 5 226. The apparatus of claim 223, wherein the processor is further operative with the program to receive the purchase price of the purchase from a register.

227. A method for determining an upsell of a purchase at a register storing a required payment amount, the register communicating with a processing system, comprising:

- 10 generating a purchase price of the purchase;
setting the required payment amount to be equal to the purchase price;
transmitting the purchase price to the processing system; and
if a rounded price is received from the processing system, setting the required payment amount to be equal to the rounded price.

15

228. An apparatus for determining an upsell of a purchase, the apparatus communicating with a processing system, comprising:

a storage device; and

a processor connected to the storage device;

20 the storage device storing

a required payment amount, and

a program for controlling the processor;

the processor operative with the program to

generate a purchase price of the purchase;

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set the required payment amount to be equal to the purchase price;
transmit the purchase price to the processing system; and
if a rounded price is received from the processing system, set the required payment amount
to be equal to the rounded price.

5

229. A method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

- determining a monetary value;
- allocating a portion of a ticket, the portion being based on the monetary value;
- 10 outputting a ticket identifier that identifies the ticket and a portion identifier that identifies the allocated portion of the ticket; and
- storing the ticket identifier and the portion identifier.

230. The method of claim 229, in which the step of determining a monetary value
15 comprises:

determining a monetary value based on an amount of change due for a purchase.

231. The method of claim 229, further comprising:
selecting the ticket from a plurality of tickets.

20

232. The method of claim 231, in which the step of selecting the ticket from a plurality of tickets comprises:

selecting a ticket having an unallocated portion at least as great as the monetary
value.

233. The method of claim 231, in which the step of selecting the ticket from a plurality of tickets comprises:

- determining a set of tickets that each have an unallocated portion at least as great as
- 5 the monetary value; and
- selecting a ticket from the set of tickets which has a minimal unallocated portion.

234. An apparatus for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

- 10 a storage device; and
- a processor connected to the storage device,
- the storage device storing
- a program for controlling the processor; and
- the processor operative with the program to:
- 15 determine a monetary value;
- allocate a portion of a ticket, the portion being based on the monetary value;
- output a ticket identifier that identifies the ticket and a portion identifier that
- identifies the allocated portion of the ticket; and
- store the ticket identifier and the portion identifier in the storage device.

20

235. The apparatus of claim 234, in which the processor is further operative with the program to:

- determine a monetary value based on an amount of change due for a purchase.

236. The apparatus of claim 234, in which the processor is further operative with the program to:

select the ticket from a plurality of tickets.

5 237. The apparatus of claim 236, in which the processor is further operative with the program to:

select a ticket having an unallocated portion at least as great as the monetary value.

238. The apparatus of claim 236, in which the processor is further operative with the
10 program to:

determine a set of tickets that each have an unallocated portion at least as great as the monetary value; and

select a ticket from the set of tickets which has a minimal unallocated portion.

15 239. A method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

determining a monetary value;

allocating a portion of each ticket of a plurality of tickets, the portion of each ticket being associated with a portion of the monetary value;

20 outputting a plurality of ticket identifiers that identify the plurality of tickets and a plurality of portion identifiers that identify the allocated portions of each ticket; and storing the ticket identifiers and the portion identifiers.

240. An apparatus for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

a storage device; and

a processor connected to the storage device,

5 the storage device storing

a program for controlling the processor; and

the processor operative with the program to:

determine a monetary value;

allocate a portion of each ticket of a plurality of tickets, the portion of each

10 ticket being associated with a portion of the monetary value;

output a plurality of ticket identifiers that identify the plurality of tickets and

a plurality of portion identifiers that identify the allocated portions of each ticket; and

store the ticket identifiers and the portion identifiers in the storage device.

15 241. A method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

determining an amount of change due for a purchase;

determining a monetary value based on the amount of change due;

selecting a ticket from a plurality of tickets, the selected ticket having an unallocated

20 portion at least as great as the monetary value;

allocating at least a portion of the selected ticket, the portion being based on the monetary value;

outputting a ticket identifier that identifies the ticket and a portion identifier that identifies the allocated portion of the selected ticket; and

storing the ticket identifier and the portion identifier.

242. The method of claim 241, in which the step of determining a monetary value comprises:

5 rounding the amount of change due to a predetermined multiple, thereby generating a rounded change amount; and

 setting the monetary value equal to the rounded change amount.

243. The method of claim 242, in which the step of rounding the amount of change due
10 comprises:

 rounding down the amount of change due to a predetermined multiple, thereby generating a rounded-down change amount.

244. The method of claim 241, further comprising:

15 outputting an offer to exchange a fractional lottery ticket for change due.

245. An apparatus for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

 a storage device; and

20 a processor connected to the storage device,

 the storage device storing

 a program for controlling the processor; and

 the processor operative with the program to:

 determine an amount of change due for a purchase;

determine a monetary value based on the amount of change due;
select a ticket from a plurality of tickets, the selected ticket having an
unallocated portion at least as great as the monetary value;
allocate at least a portion of the selected ticket, the portion being based on the
5 monetary value;
output a ticket identifier that identifies the ticket and a portion identifier that
identifies the allocated portion of the selected ticket; and
store the ticket identifier and the portion identifier in the storage device.

10 246. The apparatus of claim 245, in which the processor is further operative with the
program to:

round the amount of change due to a predetermined multiple, thereby generating a
rounded change amount; and
set the monetary value equal to the rounded change amount.

15

247. The apparatus of claim 246, in which the processor is further operative with the
program to:

round down the amount of change due to a predetermined multiple, thereby
generating a rounded-down change amount.

20

248. The apparatus of claim 245, in which the processor is further operative with the
program to:

output an offer to exchange a fractional lottery ticket for change due.

249. A method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

receiving a ticket identifier that identifies a ticket and a portion identifier that identifies an allocated portion of the ticket;

5 determining a prize value of the ticket; and

determining a portion of the prize value based on the allocated portion of the ticket.

250. An apparatus for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

10 a storage device; and

a processor connected to the storage device,

the storage device storing

a program for controlling the processor; and

the processor operative with the program to:

15 receive a ticket identifier that identifies a ticket and a portion identifier that identifies an allocated portion of the ticket;

determine a prize value of the ticket; and

determine a portion of the prize value based on the allocated portion of the ticket.

20

251. A method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

determining a monetary value;

allocating at least a portion of a ticket, the portion being based on the monetary value;

determining a prize value of the ticket; and

providing a portion of the prize value based on the allocated portion of the ticket.

5

252. An apparatus for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

a storage device; and

a processor connected to the storage device,

10 the storage device storing

a program for controlling the processor; and

the processor operative with the program to:

determine a monetary value;

allocate at least a portion of a ticket, the portion being based on the monetary

15 value;

determine a prize value of the ticket; and

provide a portion of the prize value based on the allocated portion of the

ticket.

20 253. A method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

maintaining a supply of tickets, each ticket having an unallocated portion thereof;

acquiring an additional ticket.

254. The method of claim 253, in which the step of acquiring an additional ticket comprises:

counting a number of tickets having an unallocated portion that is above a first predetermined threshold; and

5 acquiring an additional ticket if the number of tickets having an unallocated portion that is above the first predetermined threshold is below a second predetermined threshold.

255. The method of claim 253, in which the step of acquiring an additional ticket comprises:

10 receiving an indication of a requested portion;

counting a number of tickets having an unallocated portion that is above the requested portion; and

acquiring an additional ticket if the number of tickets having unallocated portion that is above the requested portion is below a predetermined threshold.

15

256. The method of claim 253, in which the step of acquiring an additional ticket comprises:

acquiring a predetermined number of additional tickets.

20 257. The method of claim 253, further comprising:

calculating a sum of the unallocated portions of the tickets.

258. The method of claim 257, in which the step of acquiring an additional ticket comprises:

acquiring an additional ticket if the calculated sum is below a predetermined threshold.

259. An apparatus for facilitating the purchase of fractional lottery tickets using a point-
5 of-sale terminal, comprising:
a storage device; and
a processor connected to the storage device,
the storage device storing
a program for controlling the processor; and
10 the processor operative with the program to:
maintain a supply of tickets, each ticket having an unallocated portion
thereof; and
acquire an additional ticket.

- 15 260. The apparatus of claim 259, in which the processor is further operative with the
program to:
count a number of tickets having an unallocated portion that is above a first
predetermined threshold; and
acquire an additional ticket if the number of tickets having an unallocated portion
20 that is above the first predetermined threshold is below a second predetermined threshold.

261. The apparatus of claim 259, in which the processor is further operative with the
program to:
receive an indication of a requested portion;

count a number of tickets having an unallocated portion that is above the requested portion; and

acquire an additional ticket if the number of tickets having unallocated portion that is above the requested portion is below a predetermined threshold.

5

262. The apparatus of claim 259, in which the processor is further operative with the program to:

acquire a predetermined number of additional tickets.

10 263. The apparatus of claim 259, in which the processor is further operative with the program to:

calculate a sum of the unallocated portions of the tickets.

15 264. The apparatus of claim 263, in which the processor is further operative with the program to:

acquire an additional ticket if the calculated sum is below a predetermined threshold.

265. A method for providing a supplementary product sale at a point-of-sale terminal, comprising:

20 receiving a purchase that includes at least one item;
determining an upsell based on the at least one item; and
outputting an indication of the upsell.

266. An apparatus for providing a supplementary product sale at a point-of-sale terminal, comprising:

- a storage device; and
- a processor connected to the storage device,
- 5 the storage device storing
- a program for controlling the processor; and
- the processor operative with the program to:
 - receive a purchase that includes at least one item;
 - determine an upsell based on the at least one item; and
 - 10 output an indication of the upsell.

267. A method for providing a supplementary product sale at a point-of-sale terminal, comprising:

- receiving a purchase that includes at least one item;
- 15 determining an upsell based on the at least one item;
- determining a rounded price for the at least one item and the upsell; and
- providing an offer to exchange the at least one item and the upsell for a rounded price.

20 268. The method of claim 267, further comprising:

- receiving a response to the offer; and
- exchanging the at least one item and the upsell for the rounded price.

269. An apparatus for providing a supplementary product sale at a point-of-sale terminal, comprising:

a storage device; and

a processor connected to the storage device,

5 the storage device storing

a program for controlling the processor; and

the processor operative with the program to:

receive a purchase that includes at least one item;

determine an upsell based on the at least one item;

10 determine a rounded price for the at least one item and the upsell; and

provide an offer to exchange the at least one item and the upsell for a rounded

price.

270. The apparatus of claim 269, in which the processor is further operative with the
15 program to:

receive a response to the offer; and

exchange the at least one item and the upsell for the rounded price.

271. A method for providing a supplementary product sale at a point-of-sale terminal,
20 comprising:

receiving a purchase that includes at least one item;

determining a record in a database that corresponds to the at least one item;

determining an upsell based on the record; and

outputting an indication of the upsell.

272. The method of claim 271, further comprising:

determining a rounded price for the at least one item and the upsell.

5 273. The method of claim 272, in which the step of determining a rounded price comprises:

determining the rounded price based on the record.

274. The method of claim 272, in which the step of determining a rounded price
10 comprises:

determining a purchase price of the purchase;

determining a rounding multiple based on the record; and

rounding the purchase price in accordance with the rounding multiple, thereby
generating the rounded price.

15

275. The method of claim 272, in which the step of determining a rounded price comprises:

determining a purchase price of the purchase;

determining an upsell price based on the record; and

20 adding the purchase price to the upsell price, thereby generating the rounded price.

276. The method of claim 272, further comprising:

setting a required payment amount to be the rounded price.

277. The method of claim 271, in which the step of determining a record comprises:
- determining a plurality of records in the database that each correspond to the at least one item;
 - determining a plurality of upsells, each upsell based on a record of the plurality of
 - 5 records; and
 - outputting an indication of at least one upsell of the plurality of upsells.

278. An apparatus for providing a supplementary product sale at a point-of-sale terminal, comprising:
- 10 a storage device; and
 - a processor connected to the storage device,
 - the storage device storing
 - a program for controlling the processor; and
 - the processor operative with the program to:
 - 15 receive a purchase that includes at least one item;
 - determine a record in a database that corresponds to the at least one item;
 - determine an upsell based on the record; and
 - output an indication of the upsell.

- 20 279. The apparatus of claim 278, in which the processor is further operative with the program to:
- determine a rounded price for the at least one item and the upsell.

280. The apparatus of claim 279, in which the processor is further operative with the program to:

determine the rounded price based on the record.

5 281. The apparatus of claim 279, in which the processor is further operative with the program to:

determine a purchase price of the purchase;

determine a rounding multiple based on the record; and

round the purchase price in accordance with the rounding multiple, thereby

10 generating the rounded price.

282. The apparatus of claim 279, in which the processor is further operative with the program to:

determine a purchase price of the purchase;

15 determine an upsell price based on the record; and

add the purchase price to the upsell price, thereby generating the rounded price.

283. The apparatus of claim 279, in which the processor is further operative with the program to:

20 set a required payment amount to be the rounded price.

284. The apparatus of claim 278, in which the processor is further operative with the program to:

determine a plurality of records in the database that each correspond to the at least one item;

determine a plurality of upsells, each upsell based on a record of the plurality of records; and

5 output an indication of at least one upsell of the plurality of upsells.

285. A method for controlling the performance of a supplementary process at a point-of-sale terminal, comprising:

measuring an activity rate of a point-of-sale terminal; and

10 performing a supplementary process in accordance with the activity rate.

286. The method of claim 285, in which the step of performing a supplementary process comprises:

15 disabling a system for providing a supplementary process if the activity rate is greater than a predetermined threshold.

287. The method of claim 285, in which the step of performing a supplementary process comprises:

20 enabling a system for providing a supplementary process if the activity rate is less than a predetermined threshold.

288. The method of claim 285, further comprising:

25 determining a predetermined threshold in dependence on a signal indicative of time of day.

289. An apparatus for controlling the performance of a supplementary process at a point-of-sale terminal, comprising:

a storage device; and

a processor connected to the storage device,

30 the storage device storing a program for controlling the processor; and

the processor operative with the program to:

measure an activity rate of a point-of-sale terminal; and

perform a supplementary process in accordance with the activity rate.

5 290. The apparatus of claim 289, in which the processor is further operative with the program to:

disable a system for providing a supplementary process if the activity rate is greater than a predetermined threshold.

10 291. The apparatus of claim 289, in which the processor is further operative with the program to:

enable a system for providing a supplementary process if the activity rate is less than a predetermined threshold.

15 292. The apparatus of claim 289, in which the processor is further operative to:

determine a predetermined threshold in dependence on a signal indicative of time of day.

293. A method for controlling the performance of a supplementary process at a point-of-
20 sale terminal, comprising:

measuring an activity rate of a point-of-sale terminal;

providing a supplementary product offer in accordance with the activity rate and an offer schedule.

25 294. The method of claim 293, in which the offer schedule comprises a set of supplementary product offers, each supplementary product offer corresponding to a predetermined range of activity rates.

295. The method of claim 294, in which successively time-consuming supplementary
30 product offers correspond to successively greater ranges of activity rates.

296. An apparatus for controlling the performance of a supplementary process at a point-of-sale terminal, comprising:

a storage device; and

a processor connected to the storage device,

5 the storage device storing a program for controlling the processor; and

the processor operative with the program to:

measure an activity rate of a point-of-sale terminal; and

provide a supplementary product offer in accordance with the activity rate

and an offer schedule.

10

297. The apparatus of claim 296, in which the offer schedule comprises a set of supplementary product offers, each supplementary product offer corresponding to a predetermined range of activity rates.

15 298. The apparatus of claim 297, in which successively time-consuming supplementary product offers correspond to successively greater ranges of activity rates.

299. A method for controlling the performance of a supplementary process at a point-of-sale terminal, comprising:

20 measuring a criterion;

determining, based on the criterion, whether to disable a system for providing a supplementary process; and

disabling the system for providing a supplementary process.

25 300. An apparatus for controlling the performance of a supplementary process at a point-of-sale terminal, comprising:

a storage device; and

a processor connected to the storage device, the storage device storing a program for controlling the processor; and

30 the processor operative with the program to:

measure a criterion;

determine, based on the criterion, whether to disable a system for providing a supplementary process; and
disable the system for providing a supplementary process.

- 5 301. A method for controlling the performance of a supplementary process at a point-of-sale terminal, comprising:
measuring a criterion;
determining, based on the criterion, whether to enable a system for providing a supplementary process; and
10 enabling the system for providing a supplementary process.
302. An apparatus for controlling the performance of a supplementary process at a point-of-sale terminal, comprising:
a storage device; and
15 a processor connected to the storage device, the storage device storing a program for controlling the processor; and
the processor operative with the program to:
measure a criterion;
determine, based on the criterion, whether to enable a system for providing a
20 supplementary process; and
enable the system for providing a supplementary process.
303. A method for controlling the performance of a supplementary process at a point-of-sale terminal, comprising:
25 measuring an activity rate of a plurality of point-of-sale terminals;
determining, based on the activity rate, whether to perform a supplementary process;
and
performing the supplementary process for at least one point-of-sale terminal.
- 30 304. The method of claim 303, in which the step of performing the supplementary process comprises:
performing the supplementary process for each point-of-sale terminal.

305. An apparatus for controlling the performance of a supplementary process at a point-of-sale terminal, comprising:

- a storage device; and
- 5 a processor connected to the storage device,
the storage device storing a program for controlling the processor; and
the processor operative with the program to:
 - measure an activity rate of a plurality of point-of-sale terminals;
 - determine, based on the activity rate, whether to perform a supplementary
 - 10 process; and
 - perform the supplementary process for at least one point-of-sale terminal.

306. The apparatus of claim 305, in which the processor is further operative with the program to:

- 15 perform the supplementary process for each point-of-sale terminal.

307. A method for controlling the performance of a supplementary process at a point-of-sale terminal, comprising:

- measuring an activity rate of a plurality of point-of-sale terminals;
- 20 determining, based on the activity rate, whether to disable a system for providing a supplementary process; and
- disabling a system for providing a supplementary process for each of a plurality of point-of-sale terminals.

25 308. An apparatus for controlling the performance of a supplementary process at a point-of-sale terminal, comprising:

- a storage device; and
- a processor connected to the storage device,
- the storage device storing a program for controlling the processor; and
- 30 the processor operative with the program to:
 - measure an activity rate of a plurality of point-of-sale terminals;

determine, based on the activity rate, whether to disable a system for providing a supplementary process; and

disable a system for providing a supplementary process for each of a plurality of point-of-sale terminals.

5

309. A method for controlling the performance of a supplementary process at a point-of-sale terminal, comprising:

measuring an activity rate of a point-of-sale terminal; and

if the activity rate is less than a predetermined threshold,

10

determining an upsell in dependence on a purchase,

determining an upsell price in dependence on the purchase, and

offering to exchange the upsell price for the upsell.

310. An apparatus for controlling the performance of a supplementary process at a point-of-sale terminal, comprising:

15

a storage device; and

a processor connected to the storage device,

the storage device storing a program for controlling the processor; and

the processor operative with the program to:

20

measure an activity rate of a point-of-sale terminal; and

if the activity rate is less than a predetermined threshold,

determine an upsell in dependence on a purchase,

determine an upsell price in dependence on the purchase, and

offer to exchange the upsell price for the upsell.

25

311. A method for controlling the performance of a supplementary process at a point-of-sale terminal, comprising:

receiving an override signal; and

performing a supplementary process in accordance with the override signal.

30

312. The method of claim 311, in which the step of performing comprises:

disabling a system for providing a supplementary process if the override signal does not indicate performance of the supplemental process.

313. The method of claim 311, in which the step of performing comprises:

5 enabling a system for providing a supplementary process if the override signal indicates performance of the supplemental process.

314. An apparatus for controlling the performance of a supplementary process at a point-of-sale terminal, comprising:

10 a storage device; and
a processor connected to the storage device,
the storage device storing a program for controlling the processor; and
the processor operative with the program to:
receive an override signal; and
15 perform a supplementary process in accordance with the override signal.

315. The apparatus of claim 314, in which the processor is further operative with the program to:

disable a system for providing a supplementary process if the override signal
20 does not indicate performance of the supplemental process.

316. The apparatus of claim 314, in which the processor is further operative with the program to:

enable a system for providing a supplementary process if the override signal
25 indicates performance of the supplemental process.

317. A method for controlling the performance of a supplementary process at a point-of-sale terminal, comprising:

receiving an override signal; and
30 if the override signal indicates performance of a supplemental process,
determining an upsell in dependence on a purchase,
determining an upsell price in dependence on the purchase, and

offering to exchange the upsell price for the upsell.

318. An apparatus for controlling the performance of a supplementary process at a point-of-sale terminal, comprising:

- 5 a storage device; and
- a processor connected to the storage device,
- the storage device storing a program for controlling the processor; and
- the processor operative with the program to:
 - receive an override signal; and
- 10 if the override signal indicates performance of a supplemental process,
- determine an upsell in dependence on a purchase;
- determine an upsell price in dependence on the purchase, and
- offer to exchange the upsell price for the upsell.

15 319. A method for controlling the performance of a supplementary process at a point-of-sale terminal, comprising:

- measuring an activity rate of a point-of-sale terminal; and
- if the activity rate is below a first predetermined threshold, offering a first upsell
- having an first offer speed; and
- 20 if the activity rate is above a second predetermined threshold, offering a second
- upsell having a second offer speed greater than the first offer speed.

320. An apparatus for controlling the performance of a supplementary process at a point-of-sale terminal, comprising:

- 25 a storage device; and
- a processor connected to the storage device,
- the storage device storing a program for controlling the processor; and
- the processor operative with the program to:
 - measure an activity rate of a point-of-sale terminal; and
- 30 if the activity rate is below a first predetermined threshold,
- offer a first upsell having an first offer speed; and
- if the activity rate is above a second predetermined threshold,

offer a second upsell having a second offer speed greater than the first offer speed.

321. A method for processing a supplementary product sale at a point-of-sale terminal,
- 5 comprising:
- receiving a rounding code; and
 - rounding a purchase price based on the rounding code.

322. An apparatus for processing a supplementary product sale at a point-of-sale terminal,
- 10 comprising:
- a storage device; and
 - a processor connected to the storage device,
 - the storage device storing
 - a program for controlling the processor; and
 - 15 the processor operative with the program to:
 - receive a rounding code; and
 - round a purchase price based on the rounding code.

323. A method for processing a supplementary product sale at a point-of-sale terminal,
- 20 comprising:
- receiving a rounding code, the rounding code having a corresponding rounding
 - multiple; and
 - rounding a purchase price based on the rounding multiple.

324. An apparatus for processing a supplementary product sale at a point-of-sale terminal, comprising:

a storage device; and

a processor connected to the storage device,

5 the storage device storing

a program for controlling the processor; and

the processor operative with the program to:

receive a rounding code, the rounding code having a corresponding rounding multiple; and

10 round a purchase price based on the rounding multiple.

325. A method for processing a supplementary product sale at a point-of-sale terminal, comprising:

receiving a rounding code;

15 determining a rounding multiple corresponding to the rounding code; and

rounding a purchase price based on the rounding multiple.

326. An apparatus for processing a supplementary product sale at a point-of-sale terminal, comprising:

20 a storage device; and

a processor connected to the storage device,

the storage device storing

a program for controlling the processor; and

the processor operative with the program to:

receive a rounding code;

determine a rounding multiple corresponding to the rounding code; and

round a purchase price based on the rounding multiple.

327. A method for processing a supplementary product sale at a point-of-sale terminal,

5 comprising:

receiving a plurality of rounding codes, each rounding code having a corresponding
rounding multiple and fixed price;

determining a purchase price; and

rounding the purchase price based on the rounding codes.

10

328. The method of claim 327, in which the step of rounding comprises:

adding at least one of the fixed prices to the purchase price, thereby generating an
augmented purchase price; and

rounding the augmented purchase price based on a rounding multiple.

15

329. The method of claim 327, in which the step of rounding comprises:

rounding the purchase price based on a rounding multiple, thereby generating an
augmented purchase price; and

adding at least one of the fixed prices to the augmented purchase price.

20

330. The method of claim 327, in which the step of rounding comprises:

selecting a rounding code, thereby defining a selected rounding code and a set of
unselected rounding codes.

331. The method of claim 330, in which the step of rounding further comprises:
adding the fixed price of each unselected rounding code to the purchase price,
thereby generating an augmented purchase price; and

rounding the augmented purchase price based on the rounding multiple of the
5 selected rounding code.

332. The method of claim 330, in which the step of rounding further comprises:
rounding the purchase price based on the rounding multiple of the selected rounding
code, thereby generating an augmented price; and

10 adding the fixed price of each unselected rounding code to the augmented price.

333. The method of claim 330, in which the step of selecting a rounding code comprises:
selecting a rounding code having a rounding multiple that is not greater than the
rounding multiple of each unselected rounding code.

15

334. The method of claim 330, in which the step of selecting a rounding code comprises:
selecting a rounding code having a minimal rounding multiple.

335. The method of claim 327, in which the fixed price and the rounding multiple of each
20 rounding code are equal.

336. An apparatus for processing a supplementary product sale at a point-of-sale terminal,
comprising:
a storage device; and

a processor connected to the storage device,

the storage device storing

a program for controlling the processor; and

the processor operative with the program to:

5 receive a plurality of rounding codes, each rounding code having a
corresponding rounding multiple and fixed price;

 determine a purchase price; and

 round the purchase price based on the rounding codes.

10 337. The apparatus of claim 336, in which the processor is further operative with the
program to:

 add at least one of the fixed prices to the purchase price, thereby generating an
augmented purchase price; and

 round the augmented purchase price based on a rounding multiple.

15

338. The apparatus of claim 336, in which the processor is further operative with the
program to:

 round the purchase price based on a rounding multiple, thereby generating an
augmented purchase price; and

20 add at least one of the fixed prices to the augmented purchase price.

339. The apparatus of claim 336, in which the processor is further operative with the
program to:

select a rounding code, thereby defining a selected rounding code and a set of unselected rounding codes.

340. The apparatus of claim 339, in which the processor is further operative with the
5 program to:
add the fixed price of each unselected rounding code to the purchase price, thereby
generating an augmented purchase price; and
round the augmented purchase price based on the rounding multiple of the selected
rounding code.

10

341. The apparatus of claim 339, in which the processor is further operative with the
program to:
round the purchase price based on the rounding multiple of the selected rounding
code, thereby generating an augmented price; and

15 add the fixed price of each unselected rounding code to the augmented price.

342. The apparatus of claim 339, in which the processor is further operative with the
program to:
select a rounding code having a rounding multiple that is not greater than the
20 rounding multiple of each unselected rounding code.

343. The apparatus of claim 339, in which the processor is further operative with the
program to:
select a rounding code having a minimal rounding multiple.

344. The apparatus of claim 336, in which the fixed price and the rounding multiple of each rounding code are equal.

- 5 345. A method for controlling offers that are provided at a point-of-sale terminal, comprising:
- providing a plurality of offers at a point-of-sale terminal;
 - measuring a performance rate of each offer, thereby defining a plurality of performance rates;
 - 10 selecting a subset of offers based on at least one of the plurality of performance rates; and
 - providing the subset of offers at a point-of-sale terminal.

346. The method of claim 345, in which the step of providing a plurality of offers is
15 performed during a first time period; and in which the step of providing the subset of offers is performed during a second time period which is subsequent to the first time period.

347. The method of claim 345, in which the step of providing a plurality of offers comprises:
20 providing an offer of the plurality of offers at each of a plurality of terminals.

348. The method of claim 345, further comprising:
measuring a performance rate of the subset; and
if the performance rate of the subset is less than a predetermined threshold.

providing the plurality of offers after the step of providing the subset of offers.

349. The method of claim 345, in which the step of selecting a subset of offers comprises:
5 selecting offers that have at least a predetermined performance rate.

350. The method of claim 345, in which the step of selecting a subset of offers comprises:
selecting a predetermined number of highest-performing offers.

10 351. An apparatus for controlling offers that are provided at a point-of-sale terminal, comprising:

a storage device; and

a processor connected to the storage device,

the storage device storing a program for controlling the processor; and

15 the processor operative with the program to:

provide a plurality of offers at a point-of-sale terminal;

measure a performance rate of each offer, thereby defining a plurality of performance rates;

20 select a subset of offers based on at least one of the plurality of performance rates; and

provide the subset of offers at a point-of-sale terminal.

352. The apparatus of claim 351, in which the processor is further operative with the program to:

provide a plurality of offers during a first time period; and

provide the subset of offers during a second time period which is subsequent to the first time period.

5 353. The apparatus of claim 351, in which the processor is further operative with the program to provide an offer of the plurality of offers at each of a plurality of terminals.

354. The apparatus of claim 351, in which the processor is further operative with the program to:

10 measure a performance rate of the subset; and

if the performance rate of the subset is less than a predetermined threshold,

provide the plurality of offers after a provision of the subset of offers.

355. The apparatus of claim 351, in which the processor is further operative with the
15 program to select offers that have at least a predetermined performance rate.

356. The method of claim 351, in which the processor is further operative with the program to select a predetermined number of highest-performing offers.

20 357. A method for controlling offers that are provided at a point-of-sale terminal, comprising:

providing a first offer at a point-of-sale terminal;

measuring a performance rate of the first offer; and

if the performance rate of the first offer is below a predetermined threshold,

providing a second offer at a point-of-sale terminal.

358. An apparatus for controlling offers that are provided at a point-of-sale terminal, comprising:

- 5 a storage device; and
- a processor connected to the storage device,
- the storage device storing a program for controlling the processor; and
- the processor operative with the program to:
 - provide a first offer at a point-of-sale terminal;
 - 10 measure a performance rate of the first offer; and
 - if the performance rate of the first offer is below a predetermined threshold,
 - provide a second offer at a point-of-sale terminal.

359. A method for controlling offers that are provided at a point-of-sale terminal, comprising:

- 15 providing a first offer at a first point-of-sale terminal;
- providing a second offer at a second point-of-sale terminal;
- measuring a performance rate of the first offer;
- measuring a performance rate of the second offer; and
- if the performance rate of the second offer is less than the performance rate of the
- 20 first offer,
- providing the first offer at the second point-of-sale terminal.

360. An apparatus for controlling offers that are provided at a point-of-sale terminal, comprising:

a storage device; and

a processor connected to the storage device,

the storage device storing a program for controlling the processor; and

the processor operative with the program to:

5 provide a first offer at a first point-of-sale terminal;

 provide a second offer at a second point-of-sale terminal;

 measure a performance rate of the first offer;

 measure a performance rate of the second offer; and

 if the performance rate of the second offer is less than the performance rate of the

10 first offer,

 provide the first offer at the second point-of-sale terminal.

361. A method for controlling offers that are provided at a point-of-sale terminal,
comprising:

15 for each of a plurality of purchases,

 determining an upsell in dependence on the purchase,

 determining an upsell price, each upsell price being based on a purchase, and

 offering to exchange the upsell price for the upsell;

 measuring a performance rate of each upsell, thereby defining a plurality of

20 performance rates;

 selecting a subset of upsells based on at least one of the plurality of performance

rates; and

 providing the subset of upsells at a point-of-sale terminal.

362. An apparatus for controlling offers that are provided at a point-of-sale terminal, comprising:

a storage device; and

a processor connected to the storage device,

5 the storage device storing a program for controlling the processor; and

the processor operative with the program to, for each of a plurality of purchases:

determine an upsell in dependence on the purchase,

determine an upsell price, each upsell price being based on a purchase, and

offer to exchange the upsell price for the upsell;

10 measure a performance rate of each upsell, thereby defining a plurality of performance rates;

select a subset of upsells based on at least one of the plurality of performance rates; and

provide the subset of upsells at a point-of-sale terminal.

15

363. A method for determining an upsell of a purchase at a point-of-sale terminal, comprising:

determining an upsell in dependence on the purchase; and

offering to exchange the upsell price for the upsell.

20

364. An apparatus for determining an upsell of a purchase at a point-of-sale terminal, comprising:

a storage device; and

a processor connected to the storage device,

the storage device storing

a program for controlling the processor; and the processor operative with the
program to:

determine an upsell in dependence on the purchase; and

5 offer to exchange the upsell price for the upsell.

365. A method for determining an upsell of a purchase at a point-of-sale terminal,
comprising:

generating a purchase price of the upsell;

10 determining an upsell price in dependence on the purchase price; and
offering to exchange the upsell for the upsell price.

366. An apparatus for determining an upsell of a purchase at a point-of-sale terminal,
comprising:

15 a storage device; and

a processor connected to the storage device,

the storage device storing

a program for controlling the processor; and the processor operative with the
program to:

20

generate a purchase price of the upsell;

determine an upsell price in dependence on the purchase price; and

offer to exchange the upsell for the upsell price.

367. A method for determining an upsell of a purchase at a point-of-sale terminal, comprising:

generating a purchase price of the purchase;

generating a rounded price;

5 calculating a round-up amount, the round-up amount being a difference between the purchase price and the rounded price;

determining an upsell in dependence on the round-up amount; and

outputting a signal indicative of the upsell.

10 368. An apparatus for determining an upsell of a purchase at a point-of-sale terminal, comprising:

a storage device; and

a processor connected to the storage device,

the storage device storing

15 a program for controlling the processor; and the processor operative with the program to:

generate a purchase price of the purchase;

generate a rounded price;

calculate a round-up amount, the round-up amount being a difference between the

20 purchase price and the rounded price;

determine an upsell in dependence on the round-up amount; and

output a signal indicative of the upsell.

369. A method for determining an upsell of a purchase at a point-of -sale terminal,
comprising:

generating a purchase price of a purchase;

generating a rounded price;

5 calculating a round-up amount, the round-up amount being a difference between the
purchase price and the rounded price;

determining an upsell in dependence on the round up amount; and offering to
exchange the round-up amount for the upsell.

10 370. An apparatus for determining an upsell of a purchase at a point-of -sale terminal,
comprising:

a storage device; and

a processor connected to the storage device,

the storage device storing

15 a program for controlling the processor; and the processor operative with the
program to:

generate a purchase price of a purchase;

generate a rounded price;

calculate a round-up amount, the round-up amount being a difference between the

20 purchase price and the rounded price;

determine an upsell in dependence on the round up amount; and

offer to exchange the round-up amount for the upsell.

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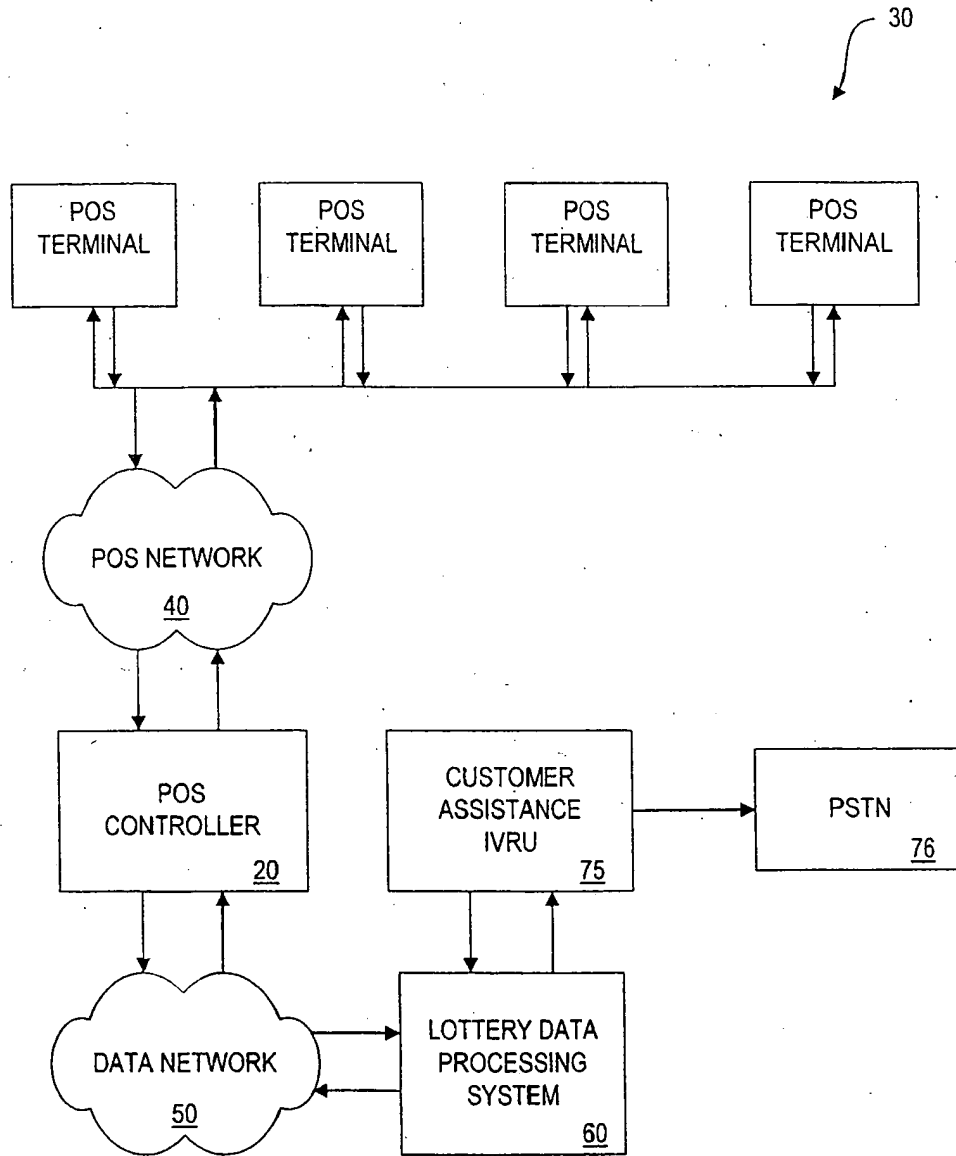


FIG. 1.

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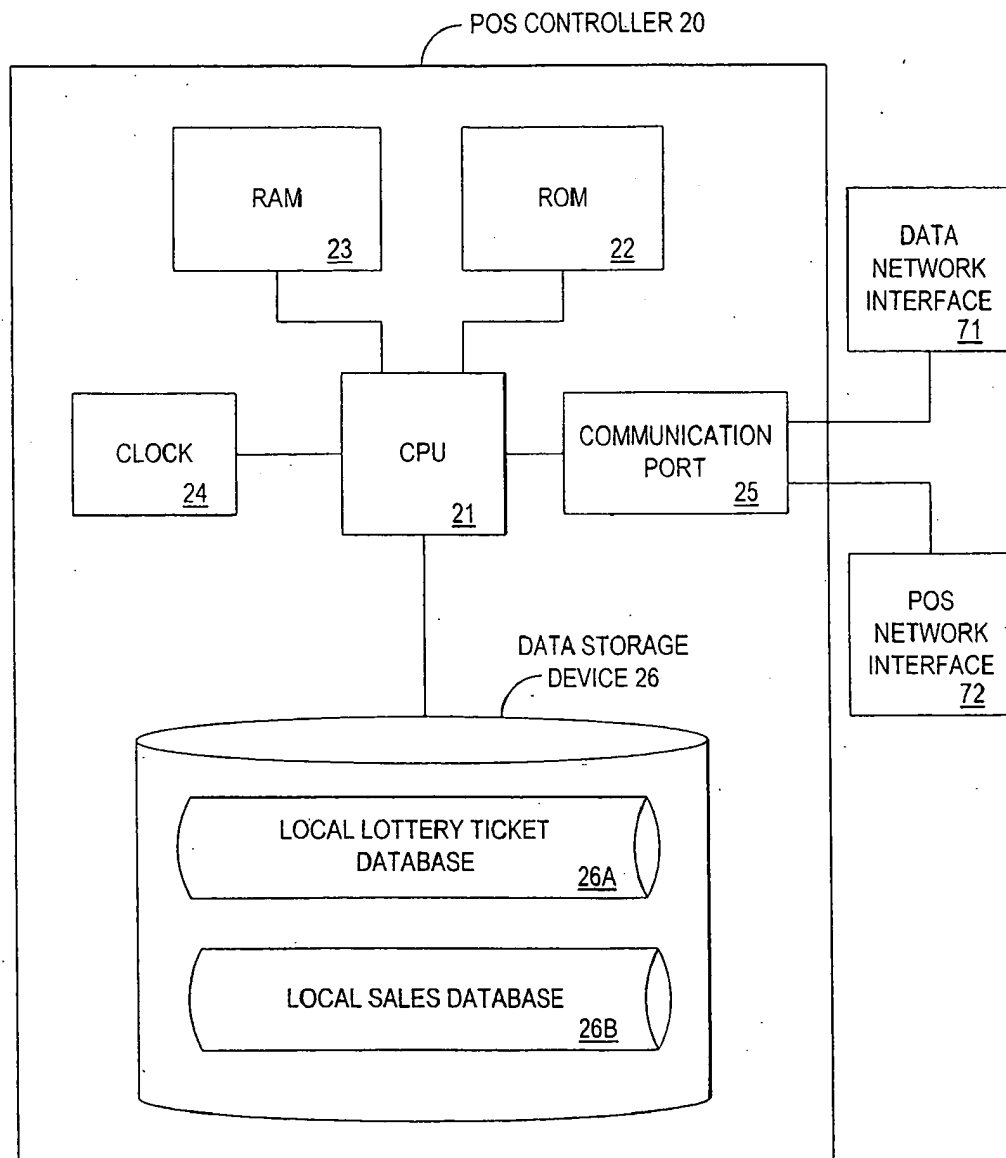


FIG. 2

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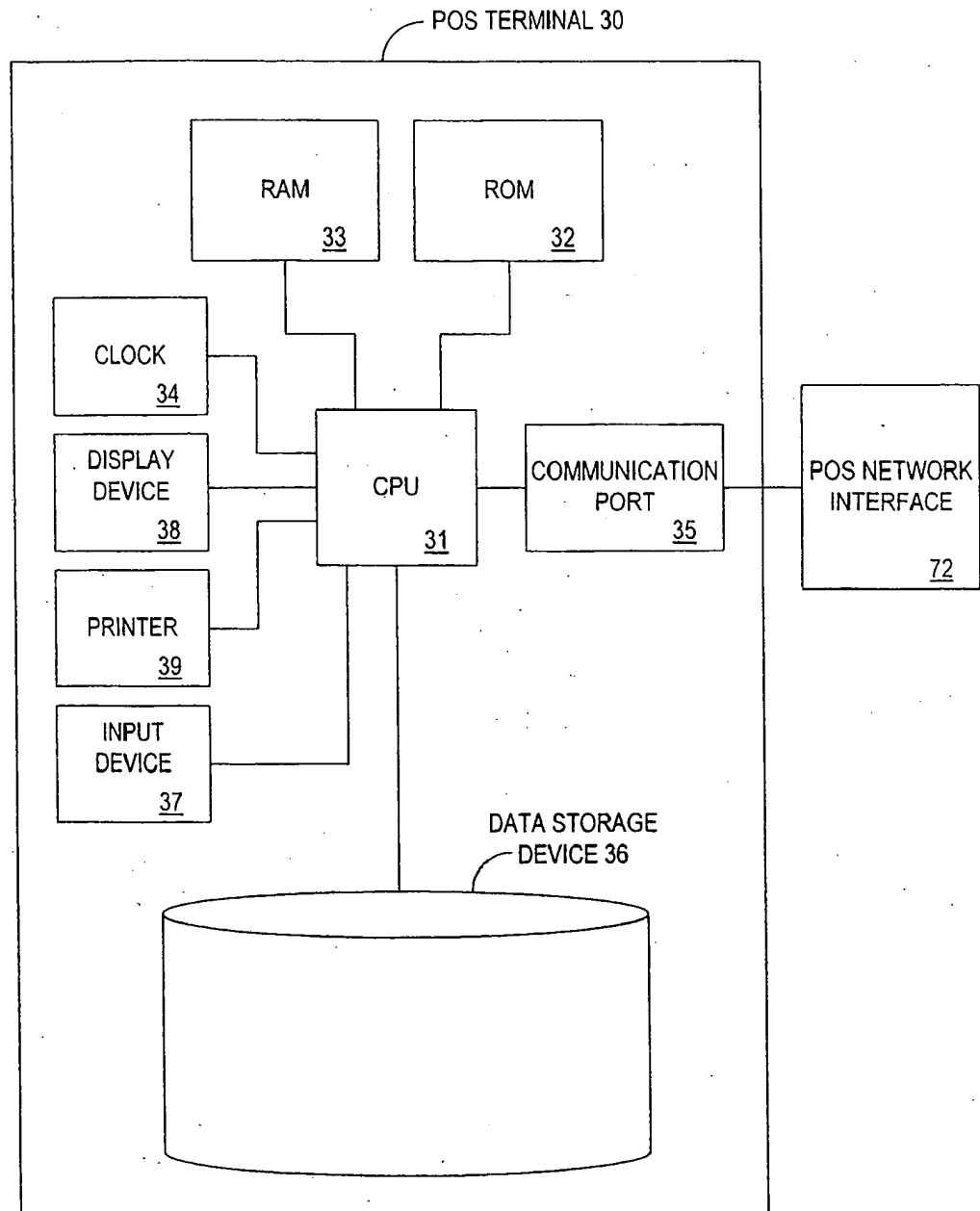


FIG. 3

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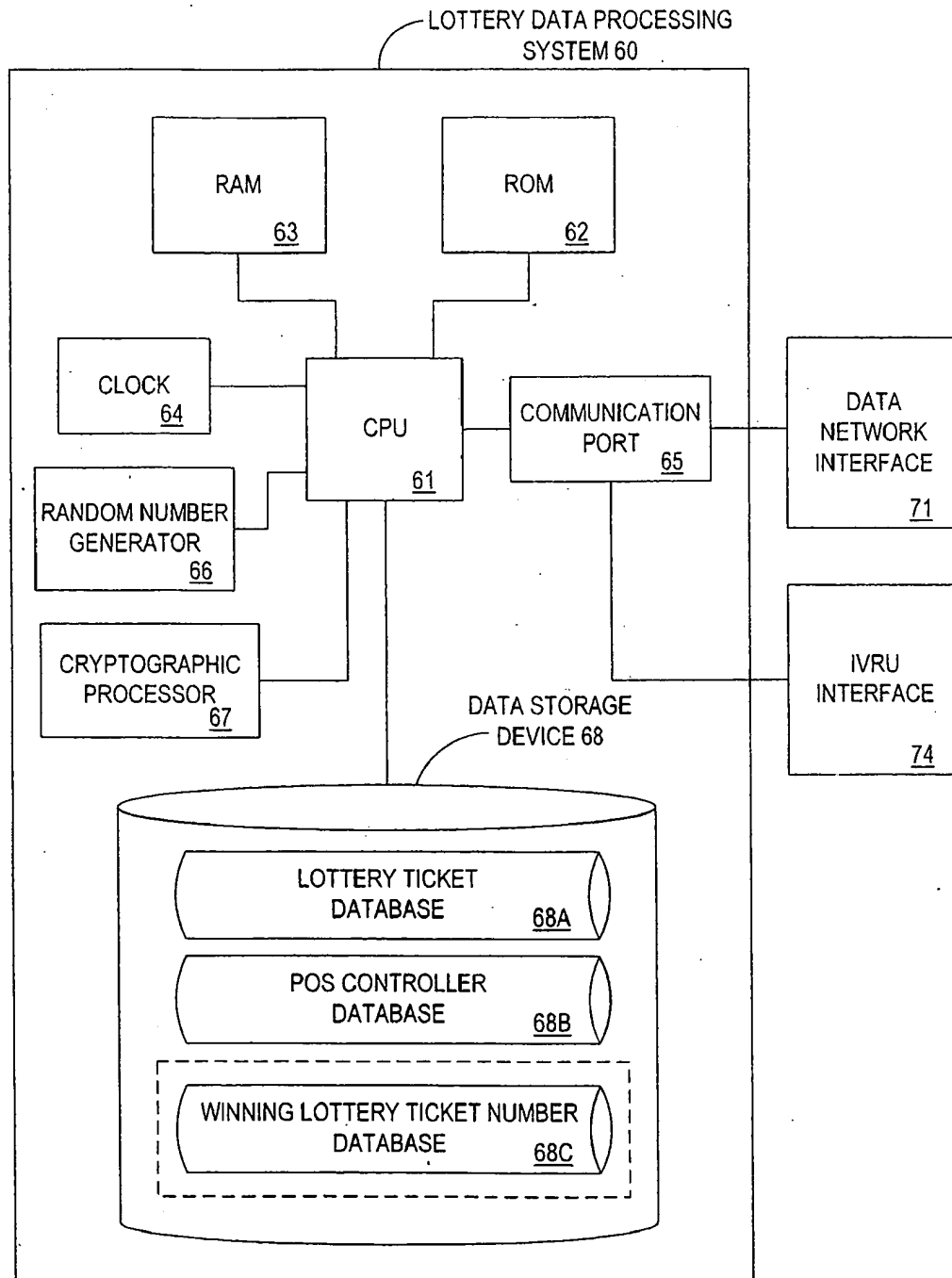


FIG. 4

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LOCAL LOTTERY TICKET
DATABASE 26A

DATE F1	SALES RECEIPT NUMBER F2	NUMBER OF TICKETS PURCHASED F3	SALE AMOUNT F4	LOTTERY TICKET NUMBERS F5
1/15/97	4532	1	\$1.00	01,12,34...
1/15/97	4533	4	\$4.00	02,07,23... 01,17,46... 11,34,56... 22,33,44...
1/15/97	4534	1	\$0.68	33,17,92...

FIG. 5

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LOTTERY TICKET DATABASE 68A

POS CONTROLLER ID NUMBER F6	DATE F7	NUMBER OF TICKETS PURCHASED F8	SALES RECEIPT NUMBER F9	SALE AMOUNT F10	LOTTERY TICKET NUMBERS F11	CRYPTOGRAPHIC CODE F12
23456	1/15/97	4	3343	\$4.00	01,10,20... 11,21,31...	5436848759 400006887
23456	1/15/97	1	4533	\$1.00	02,07,23... 01,17,46...	7493027564 393857033
23456	1/15/97	1	4534	\$0.68	33,17,92...	54665568757 6767666676
		1	1	1		
		1	1	1		

POS CONTROLLER ID # 33456

POS CONTROLLER ID # 43456

R2

FIG. 6

7/79

POS CONTROLLER DATABASE 68B

POS CONTROLLER ID NUMBER F13	POS CONTROLLER NAME F14	POS CONTROLLER LOCATION F15	TELEPHONE NUMBER F16
23456	MINI MART AND GROCERY	STAMFORD, CT 06905	(203)555-1234

R3

FIG. 7

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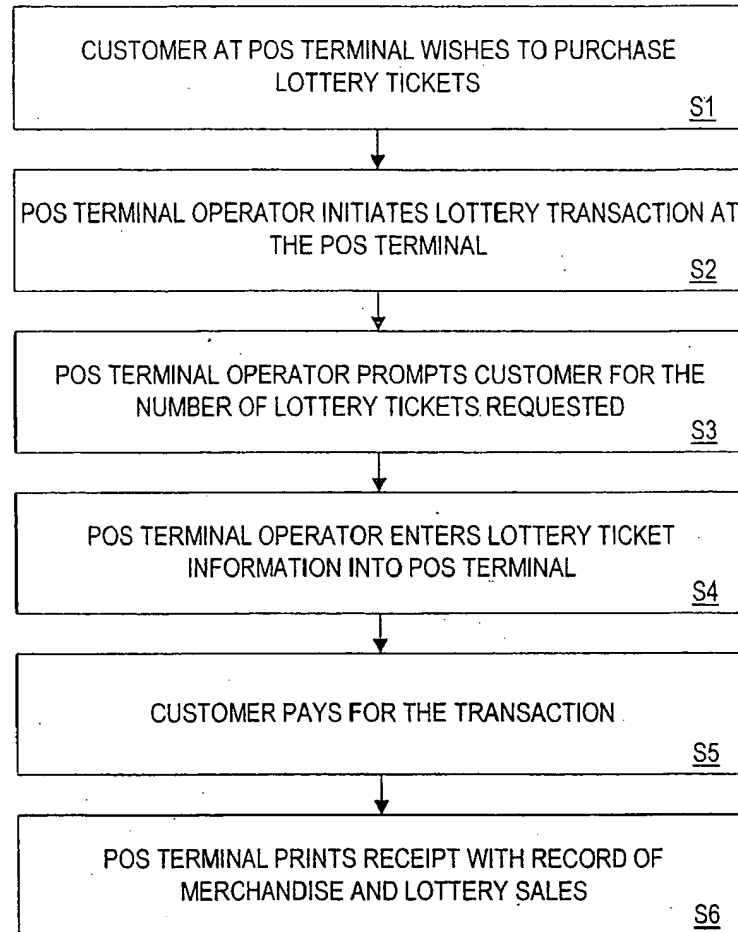


FIG. 8

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80

MINI-MART GROCERY STORE

FRUIT	2.50	
BEVERAGES	15.00	
BREAD	4.50	
VEGETABLES	1.00	
DAIRY	3.50	
CEREAL	12.50	
STEAK	35.00	
VEAL	25.00	
LOTTERY TICKETS	3.68	
TAX		
	5.32	
TOTAL		
	\$108.00	
THANK YOU!		
CONNECTICUT L O T T E R Y		
	PRICE	
TICKET 1	\$1	01 10 20 30 36 39
TICKET 2	\$1	11 21 24 25 32 33
TICKET 3	\$1	07 09 11 13 15 17
TICKET 4	\$0.68	08 13 15 16 27 41

87

FIG. 9

10/79

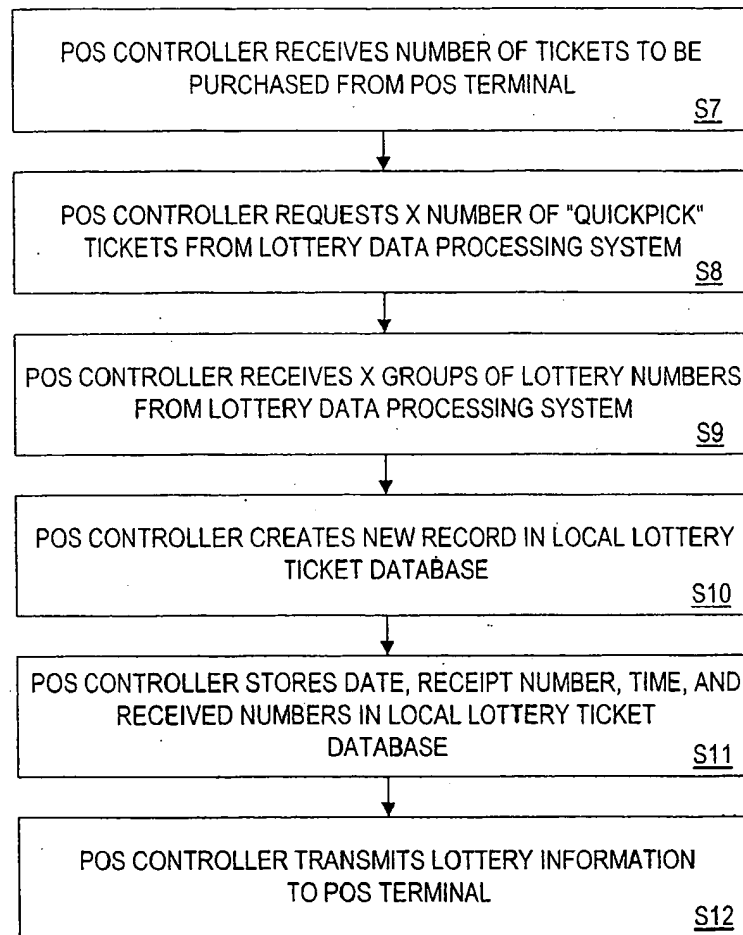


FIG. 10

11/79

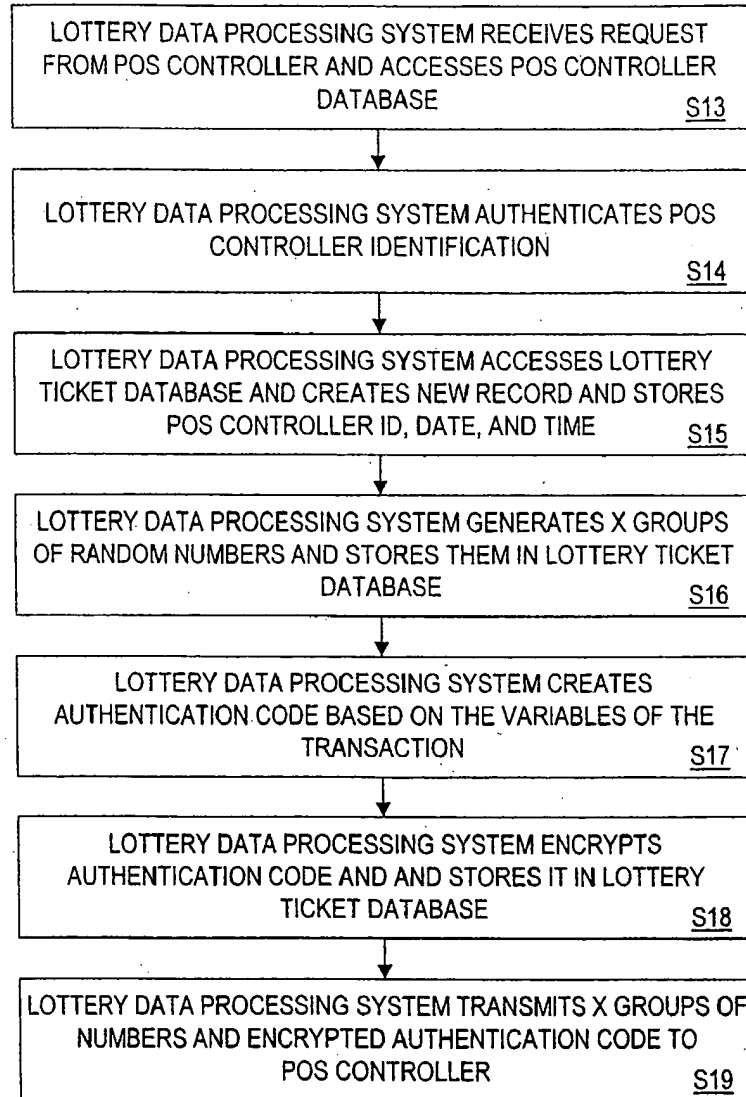


FIG. 11

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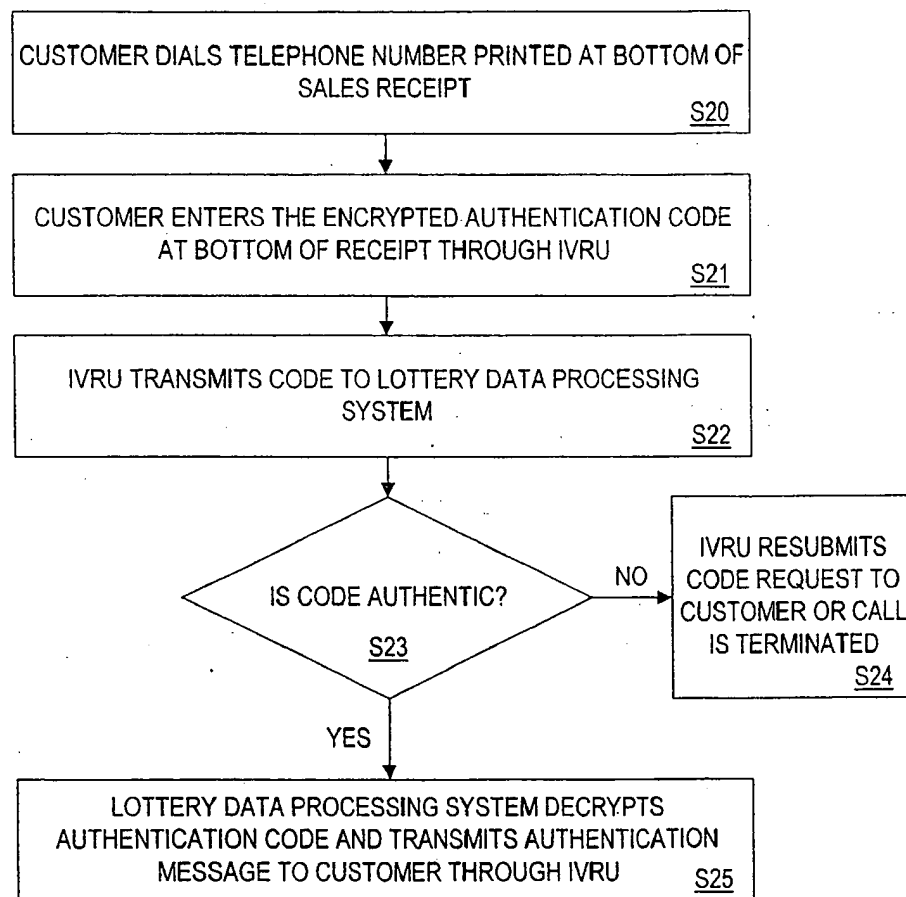


FIG. 12

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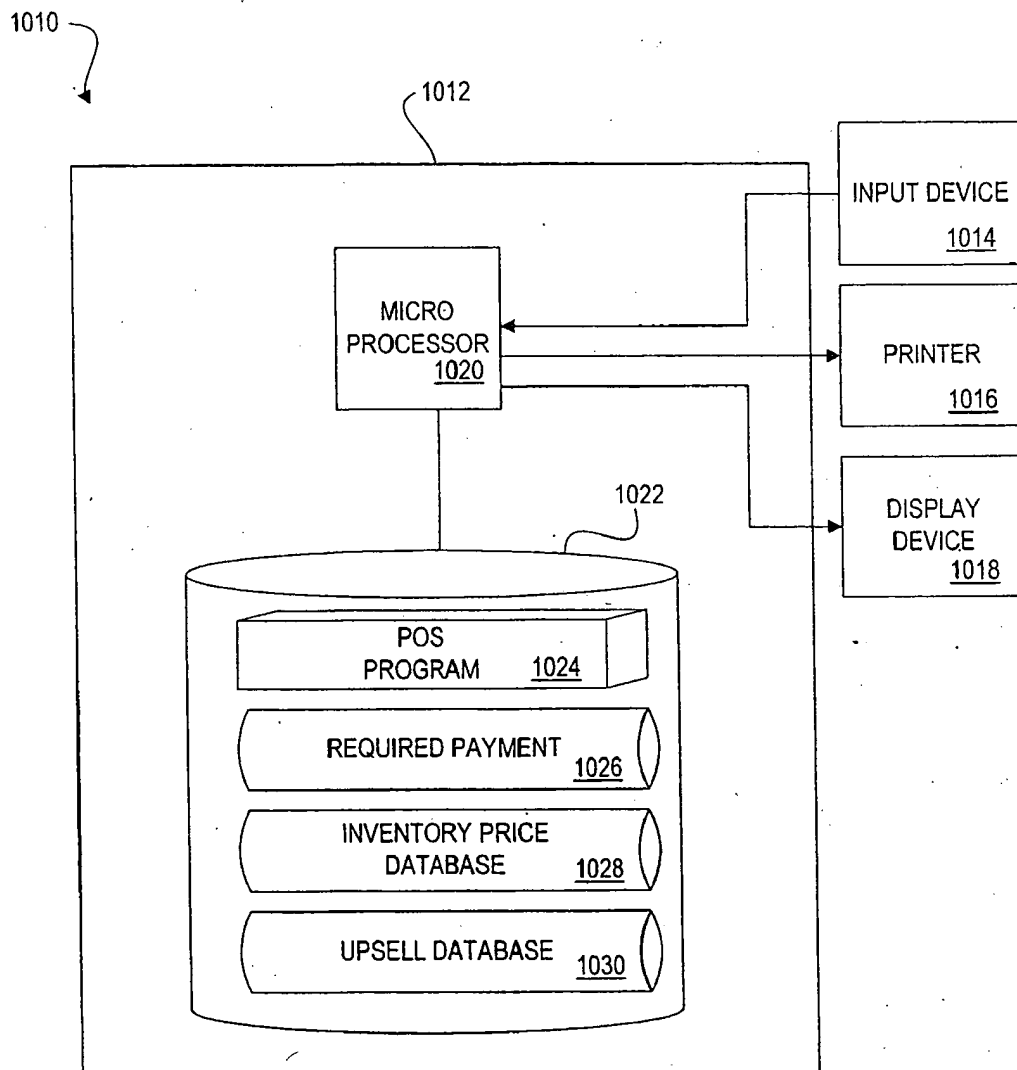


FIG. 13A

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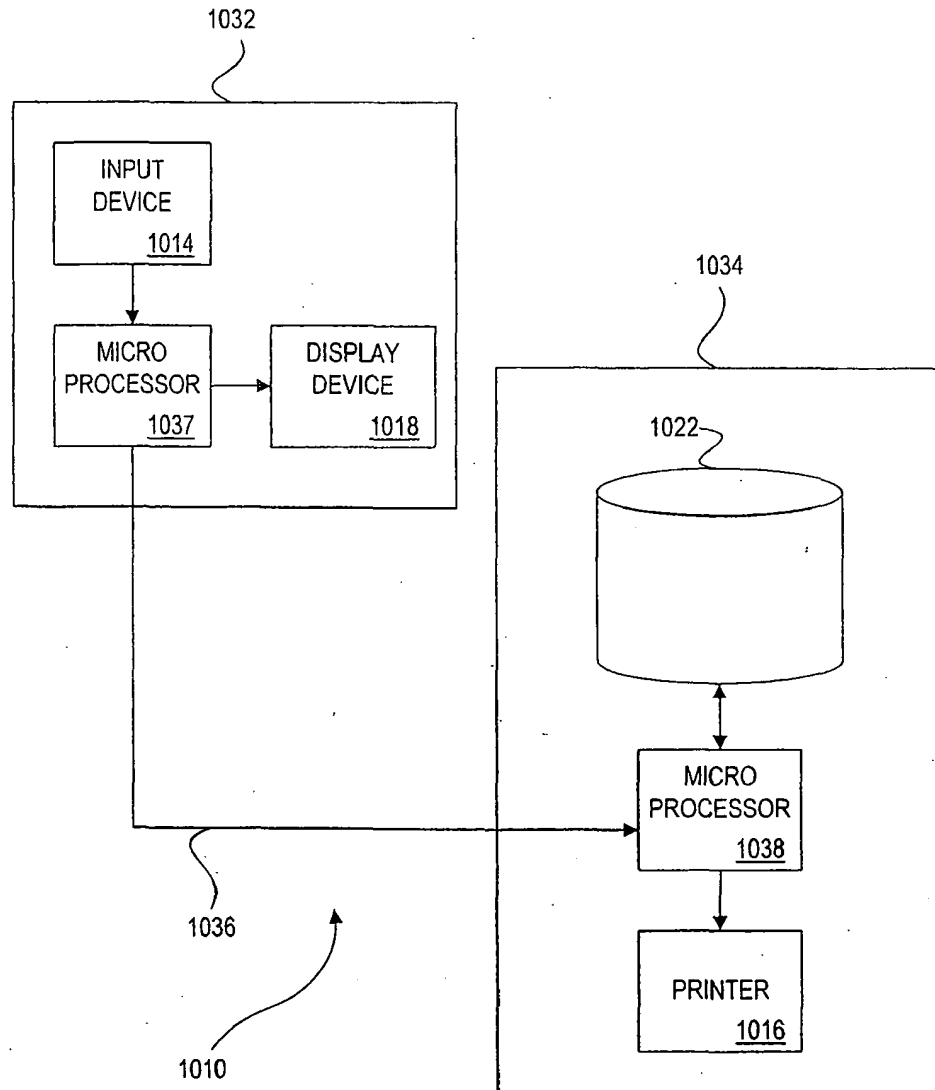


FIG. 13B

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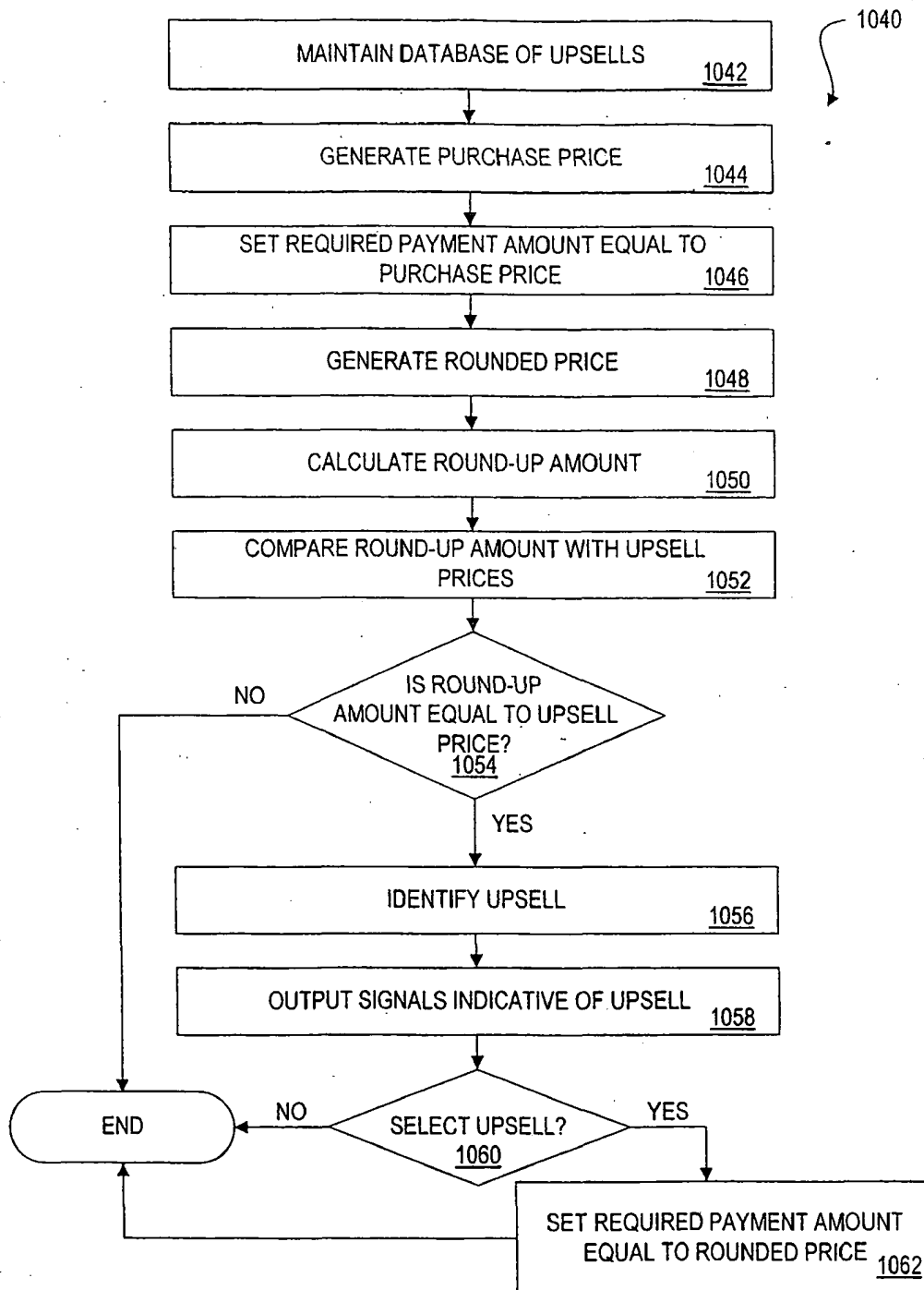


FIG. 14

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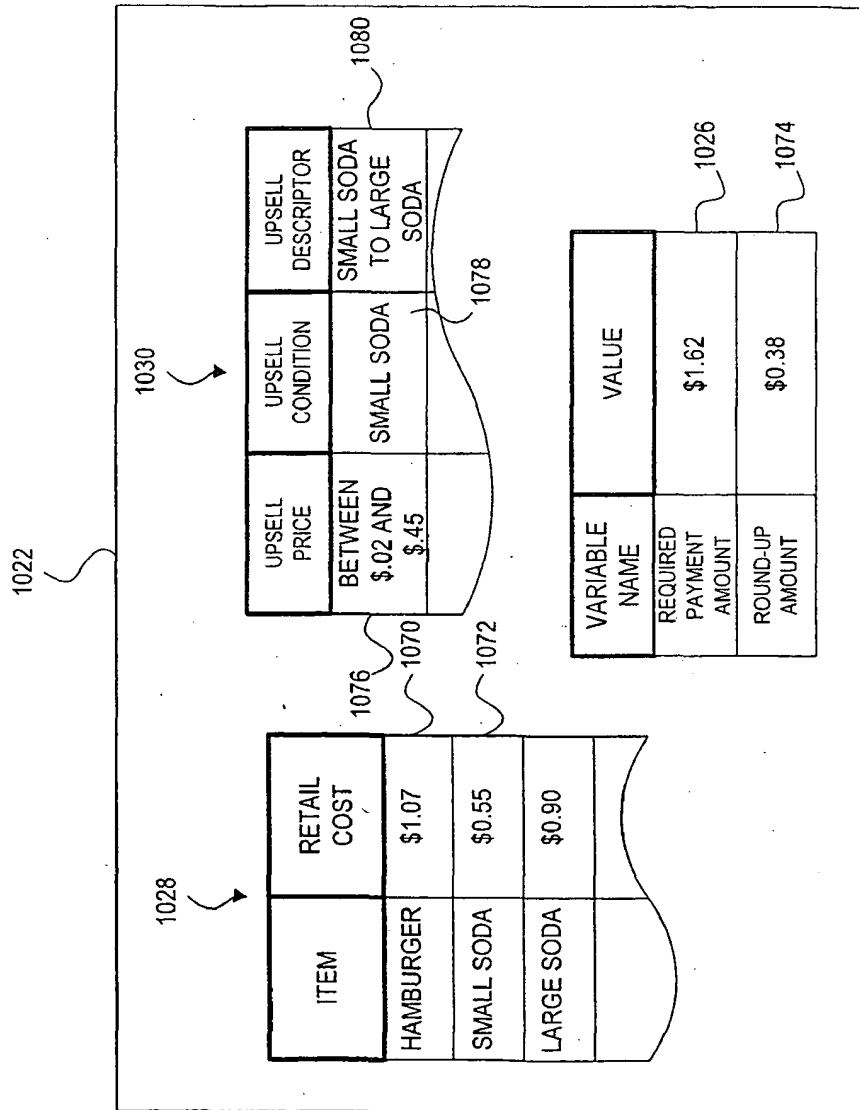


FIG. 15

17/79

1090

UPSELL CODE(S) 1104	UPSELL PRICE 1092	ITEMS PURCHASED 1096	CUSTOMER ID REQUIRED? 1098	CUSTOMER PREFERENCES 1100	TIME PURCHASED 1102	COST 1103	UPSELL DESCRIPTOR 1094
A	BETWEEN \$.02 AND \$.45	SMALL SODA	NO	NA	NA	\$0.02	SMALL SODA TO LARGE SODA
B	BETWEEN \$.50 AND \$.80	8	YES	NA	NA	\$0.50	X LARGE COLA UPGRADE, DELUXE TACO UPGRADE, FREE TACO COUPON
C	MORE THAN \$.70	NA	NO	NA	NA	\$0.70	FREE TACO COUPON
D	BETWEEN \$.30 AND \$.70	HAMBURGER	NO	NA	NA	\$0.25	PROMOTIONAL CUP
E	BETWEEN \$1.50 AND \$3.50	NA	YES	NA	> 5:00PM	\$1.00	MOVIE TICKET
F	BETWEEN \$.20 AND \$.60	1,5	NO	NA	NA	\$0.20	X LARGE COLA UPGRADE, DELUXE TACO UPGRADE
G	LESS THAN \$.20	2	NO	NA	NA	\$0.00	LARGE COLA UPGRADE
H	BETWEEN \$.05 AND \$.20	5	NO	NA	NA	\$0.05	DELUXE TACO UPGRADE
I	LESS THAN \$.50	3	YES	5, 7, 3	NA	\$0.01	X LARGE COLA UPGRADE, FREE TACO COUPON

FIG. 16

18/79

1110
↓

CUSTOMER ID 1112	CUSTOMER NAME 1114	ADDRESS 1116	PHONE 1118	HISTORICAL PREFERENCES 1120
123456	BILL SMITH	1425 HARD RD. NORWALK, CT 06805	(111)111-1111	BB
123457	JACK GREEN	213 PINK ST. NORWALK, CT 06850	(111)222-2222	NA
123456	ELIOT BROWN	21 CIRCLE DR. NORWALK, CT 06850	(111)333-3333	5,7,3,1

FIG. 17

19/79

1130

IDENTIFIER 1136	PRODUCT 1132	PRICE 1134	NUMBER IN STOCK 1138	EXPIRATION 1140
1	HAMBURGER	\$1.07	17	4:00 PM
2	SMALL SODA	\$0.55	NA	NA
1	LARGE SODA	\$0.90	NA	NA
4	X LARGE SODA	\$1.39	NA	NA
5	HARD TACO	\$0.69	20	2:00 PM
7	SOFT TACO	\$0.69	50	2:00 PM
4	#8 COMBO: HARD TACO, CHICKEN FAJITA, MEDIUM COLA	\$3.49	14	14
5	CINNAMON TREAT	\$0.59	3	2:00 PM
10	DELUXE TACO	\$0.99	0	2:00 PM

FIG. 18

20/79

1150



DATE OFFERED 1158	UPSELL(S) OFFERED 1152	ROUND-UP AMOUNT 1154	UPSELL ACCEPTED 1156	EXPIRATION 1162	DATE REDEEMED 1164	CUSTOMER ID 1160
8/12/97	G,H	\$.18	G	NA	NA	NA
8/12/97	B	\$.72	NONE	NA	NA	NA
8/12/97	C,D	\$.62	C	14 DAYS	8/22/97	123456
8/12/97	E	\$2.72	E	NA	NA	123560
8/12/97	I	\$.43	I	14 DAYS	EXPIRED	123458

FIG. 19

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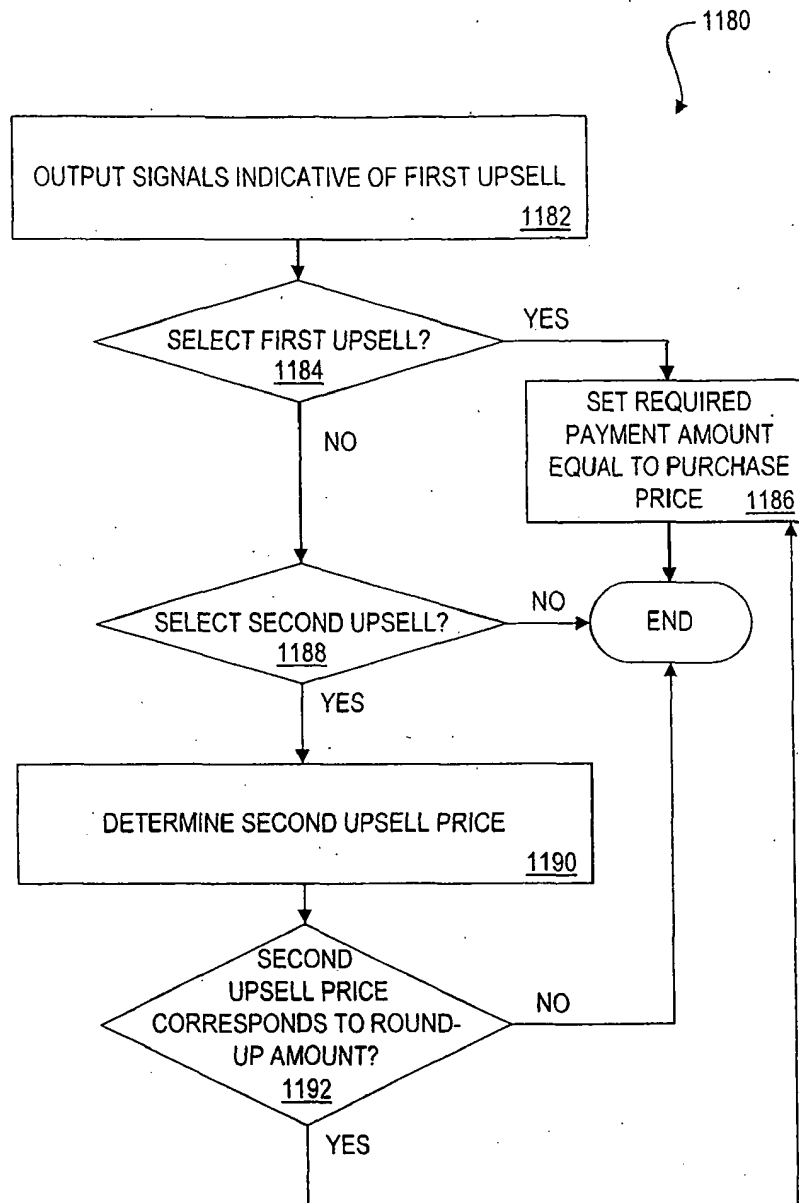


FIG. 20

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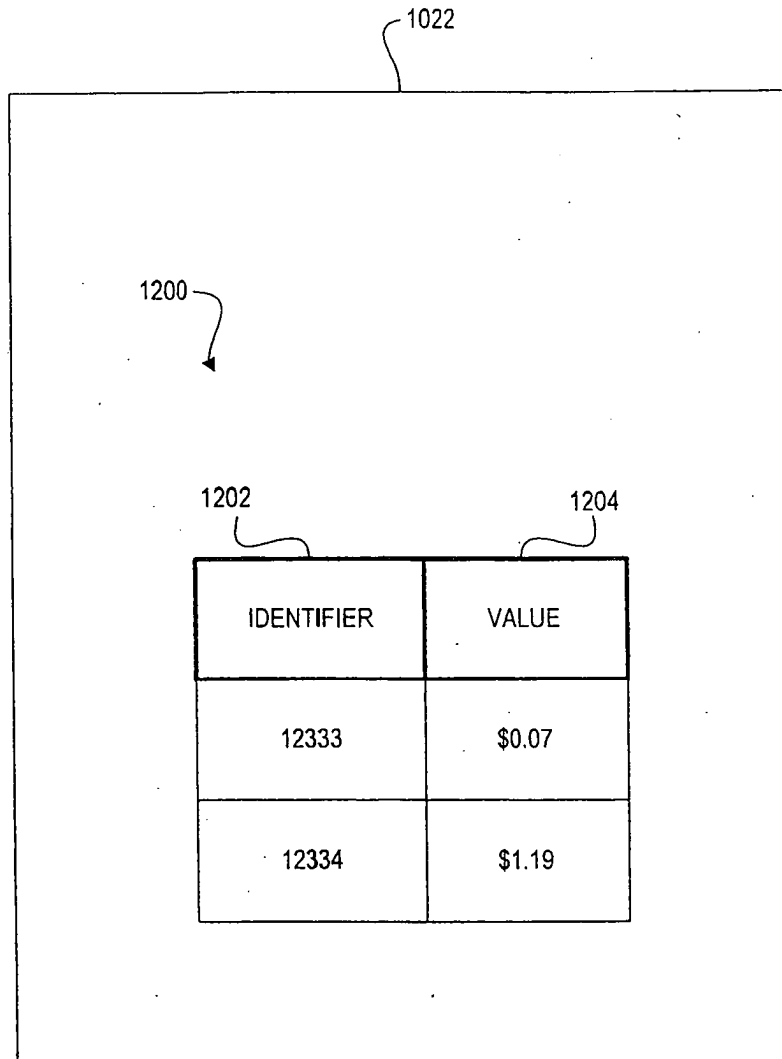


FIG. 21

23/79

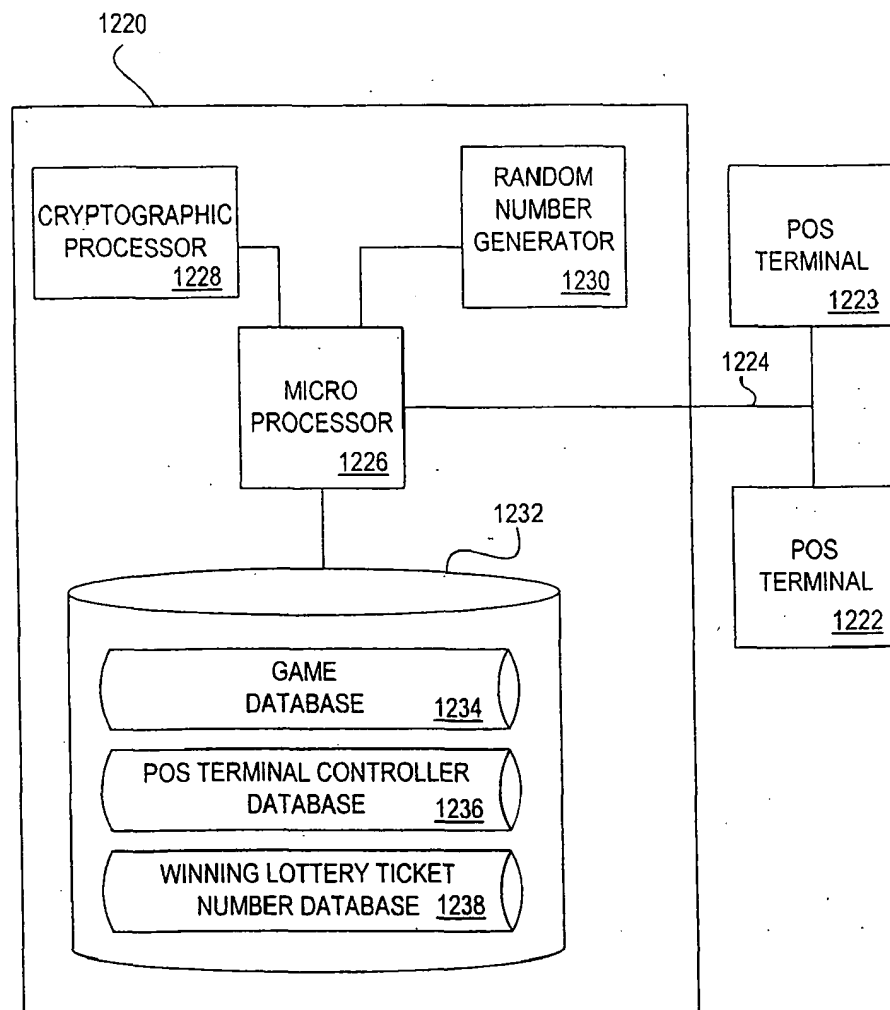


FIG. 22

24/79

1260

1278

CUSTOMER ID 1262	CUSTOMER NAME 1264	ADDRESS 1266	PHONE 1268	HISTORICAL PREFERENCES 1270	LINKED CUSTOMERS 1272	UPSELL DUE 1274	UPSELL EXPIRATION 1275
123456	BILL SMITH	1425 HARD RD. NORWALK, CT 06850	(111)111-1111	BB	123459	-	-
123457	JACK GREEN	213 PINK ST. NORWALK, CT 06850	(111)222-2222	NA	-	CC	1/1/97
123458	ELIOT BROWN	21 CIRCLE DR. NORWALK, CT 06850	(111)333-3333	5,7,3,I	199998,199999	-	-
123459	JILL SMITH	4210 BIG LOOP NORWALK, CT 06850	(111)444-4444	-	-	A	8/3/97

1276

1277

1280

1281

1282

FIG. 23

25/79

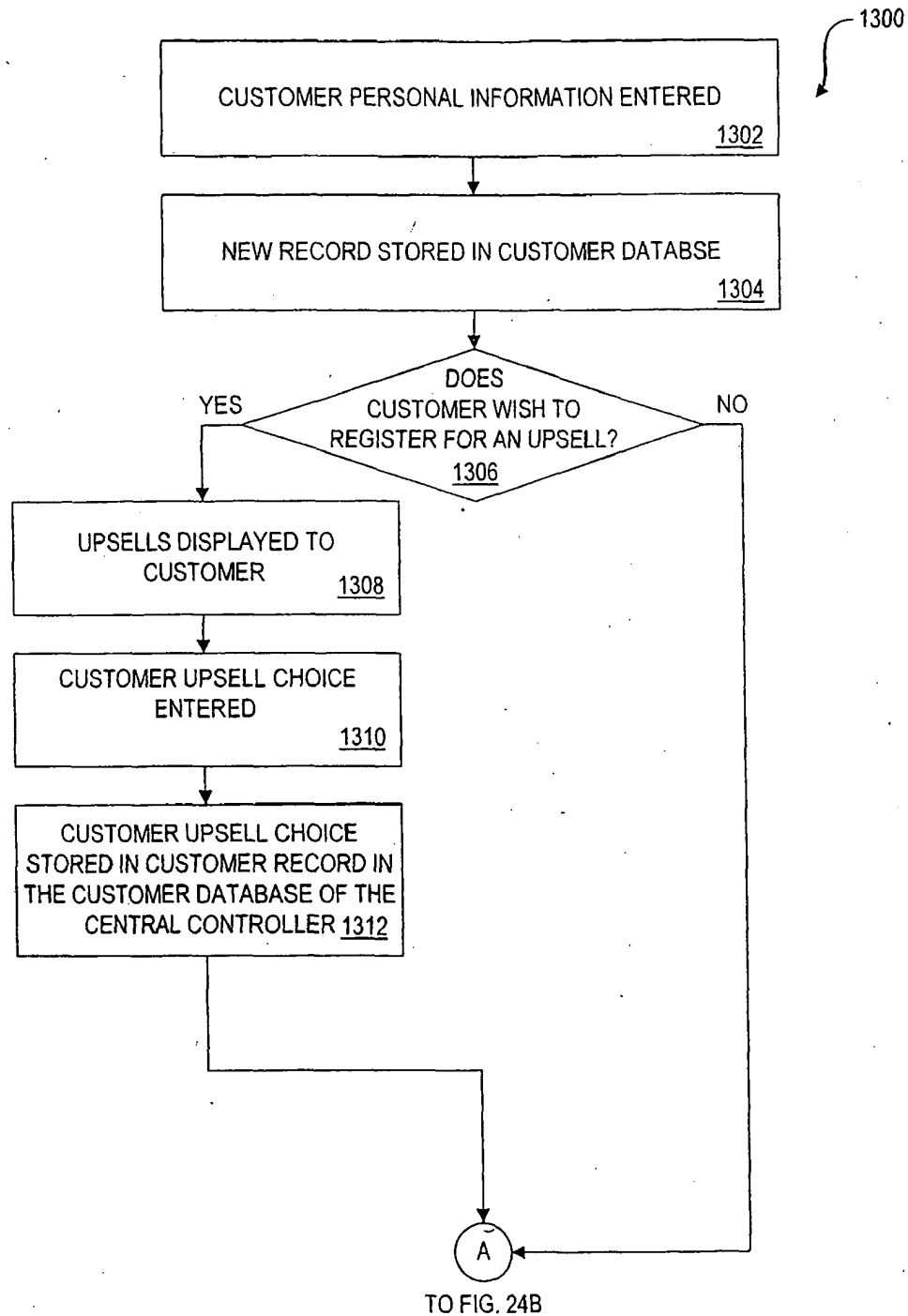


FIG. 24A

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FROM FIG. 24A

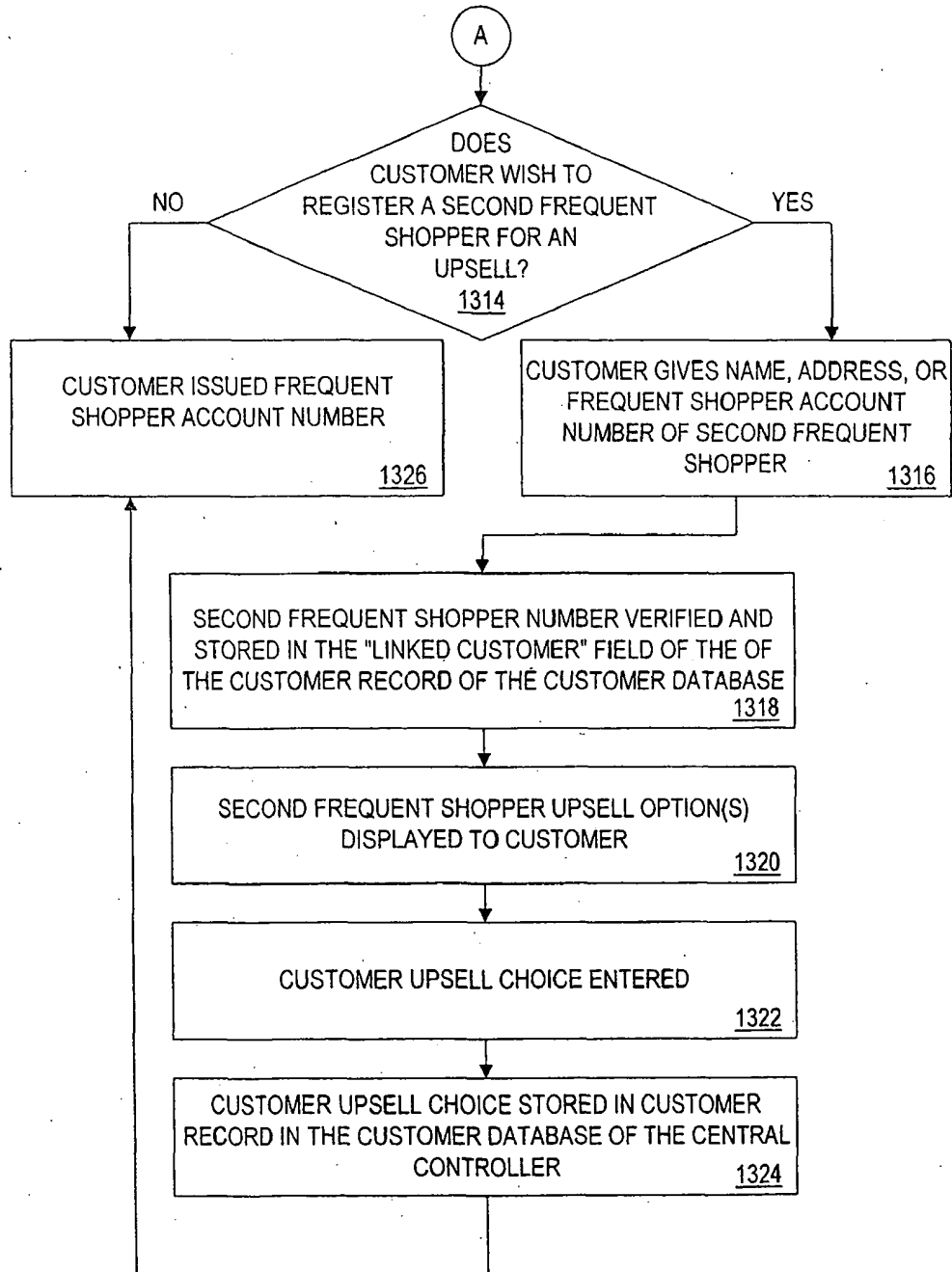


FIG. 24B

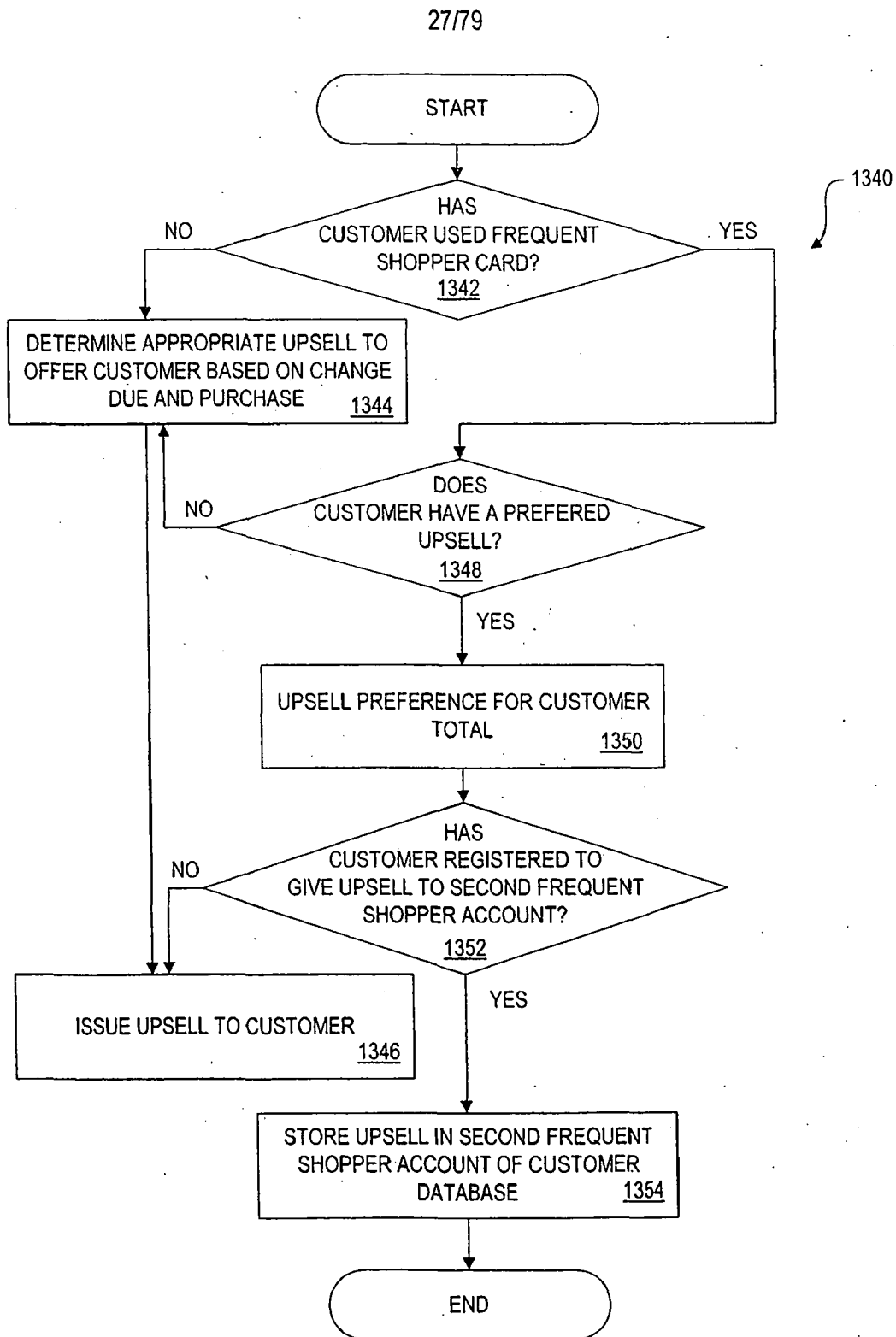


FIG. 25

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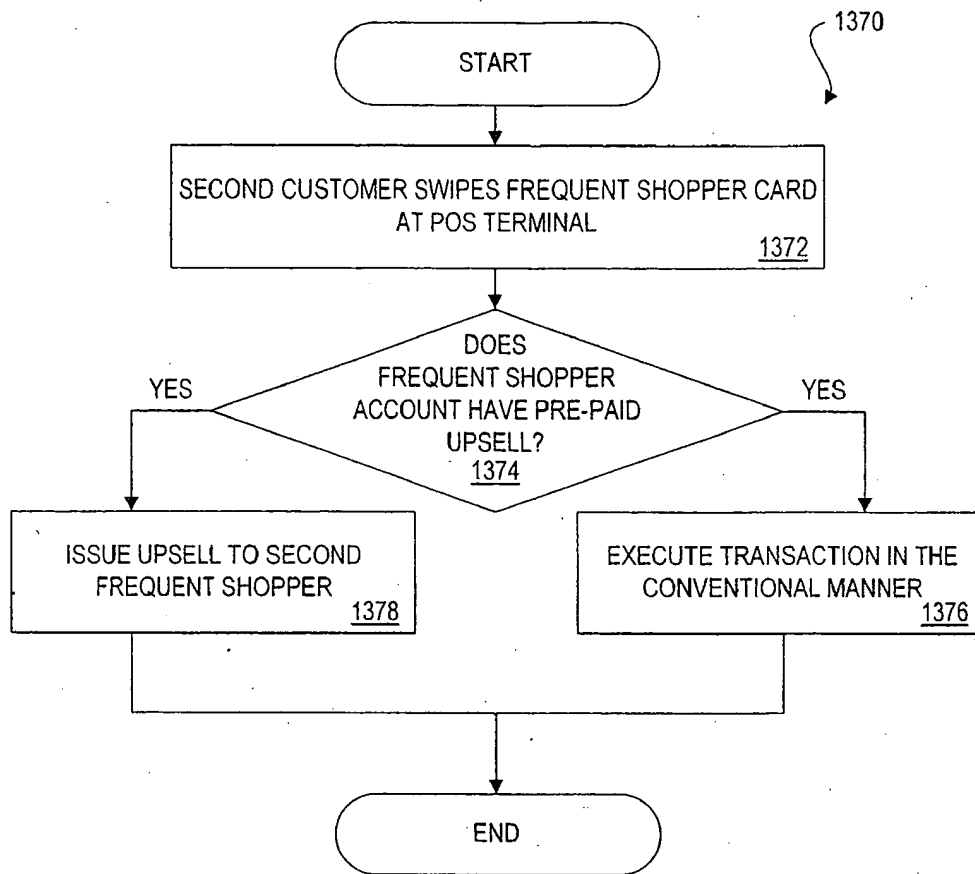


FIG. 26

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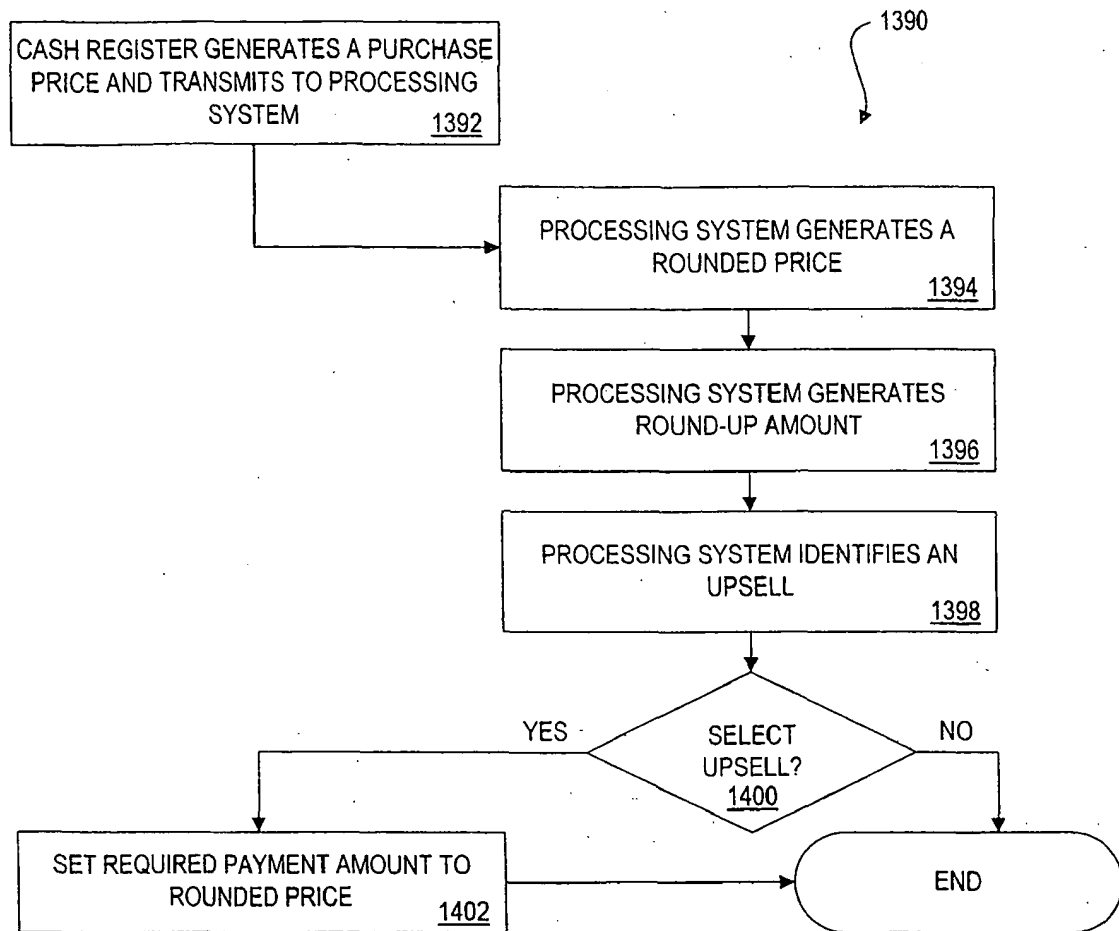


FIG. 27

30/79

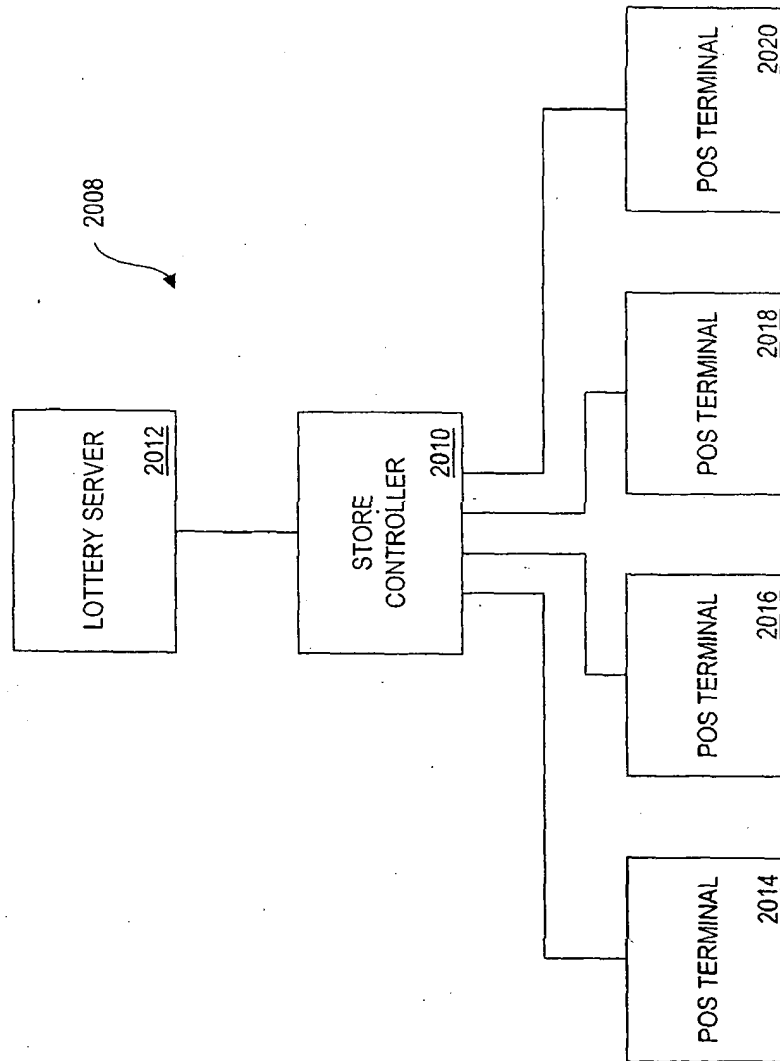


FIG. 28

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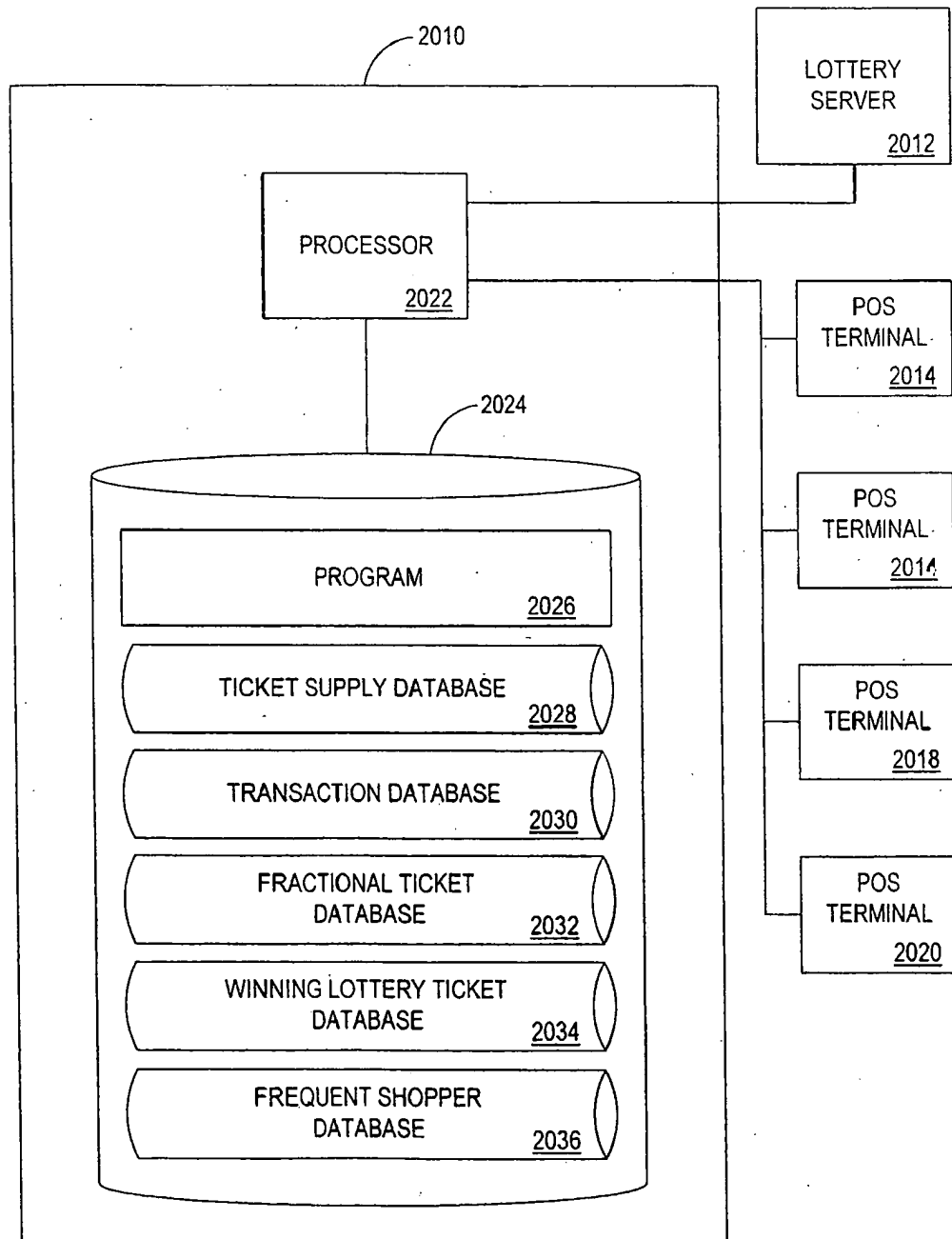


FIG. 29

32/79

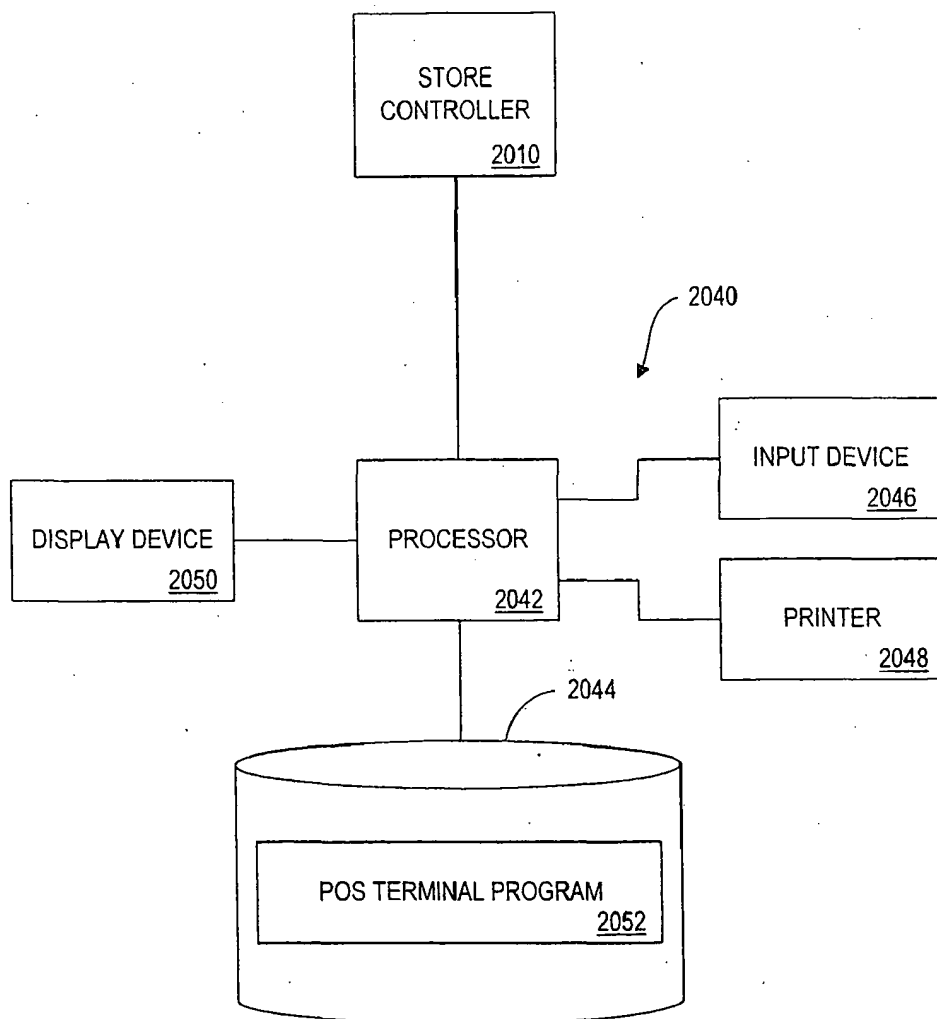


FIG. 30

33/79

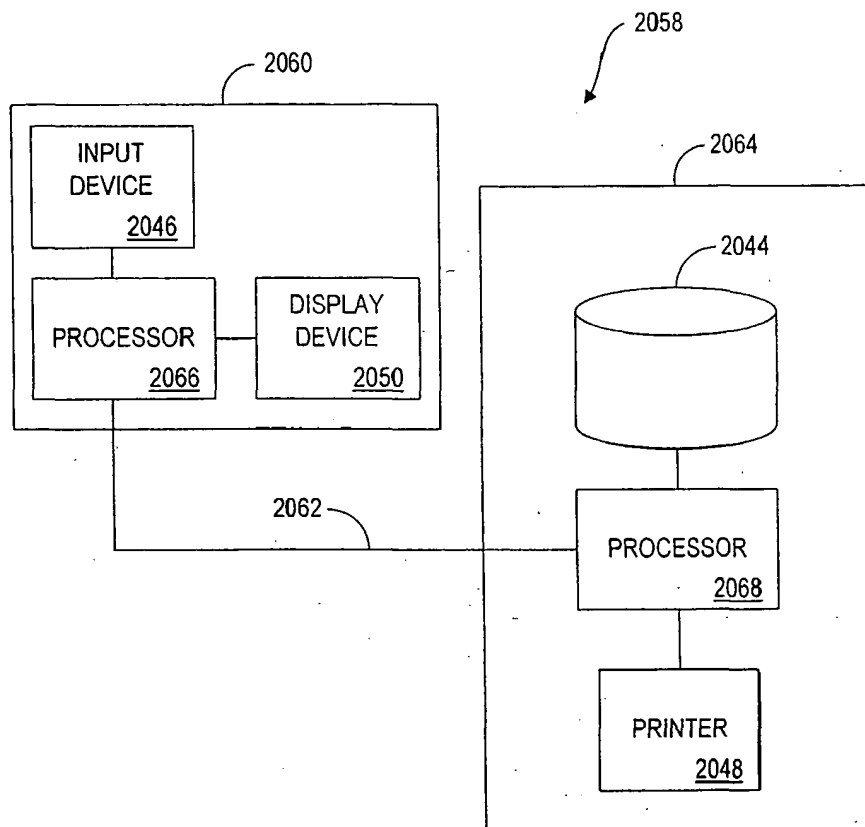


FIG. 31

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2030



TICKET IDENTIFIER 2090	DRAWING DATE 2092	TICKET NUMBERS 2094	UNALLOCATED PORTION 2096	TICKET PRICE 2098
1234560	2/10/98	11,12,13,04,21,34	\$0.12	\$1.00
1234561	2/10/98	01,21,04,25,13,11	\$0.31	\$1.00
1234562	2/10/98	11,25,35,04,06,03	\$0.23	\$1.00
1234562	2/10/98	01,20,30,16,28,13	\$0.78	\$1.00
1234561	2/10/98	02,30,21,26,24,01	\$0.70	\$1.00

2080

2082

2084

2086

2088

2100

TOTAL REMAINING UNALLOCATED AMOUNT	\$1.54
--	--------

FIG. 32

35/79

2110

TICKET IDENTIFIER	DRAWING DATE	TICKET NUMBERS	UNALLOCATED PORTION	TICKET PRICE
1234560	2/10/98	11,12,13,04, 21,34	\$0.12	\$1.00
1234561	2/10/98	01,21,04,25, 13,11	\$0.31	\$1.00
1234562	2/10/98	11,25,35,04, 06,03	\$0.23	\$1.00
1234561	2/10/98	01,20,30,16, 28,13	\$0.78	\$1.00
1234564	2/10/98	02,30,21,26, 24,01	\$0.70	\$1.00
TOTAL REMAINING UNALLOCATED AMOUNT			\$1.54	

ROUND UP AMOUNT	\$0.35
-----------------	--------

← 2130

2120

TICKET IDENTIFIER	DRAWING DATE	TICKET NUMBERS	UNALLOCATED PORTION	TICKET PRICE
1234560	2/10/98	11,12,13,04, 21,34	\$0.12	\$1.00
1234561	2/10/98	01,21,04,25, 13,11	\$0.31	\$1.00
1234562	2/10/98	11,25,35,04, 06,03	\$0.23	\$1.00
1234563	2/10/98	01,20,30,16, 28,13	\$0.43	\$1.00
1234564	2/10/98	02,30,21,26, 24,01	\$0.10	\$1.00
TOTAL REMAINING UNALLOCATED AMOUNT			\$1.19	

FIG. 33

36/79

2032
↙

TRANSACTION NUMBER 2160	POS TERMINAL IDENTIFIER 2162	PURCHASE PRICE 2164	ROUNDING MULTIPLE 2165	ROUND UP AMOUNT 2166	ACCEPTED OFFER FOR TICKET 2168	FREQUENT SHOPPER NUMBER 2170	DATE 2172	FRACTIONAL TICKET IDENTIFIER 2174
7614234	1	\$16.88	\$1	\$0.12	YES	111111	2/10/98	1001
7614235	1	\$12.31	\$1	\$0.69	YES	111112	2/10/98	1002
7614236	2	\$13.23	\$5	\$1.77	YES	111113	2/10/98	1003
7614237	3	\$25.78	\$1	\$0.22	YES	111114	2/10/98	1004
7614238	2	\$31.10	\$10	\$0.60	NO	111115	2/10/98	N/A

2150
2152
2154
2156
2158

FIG. 34

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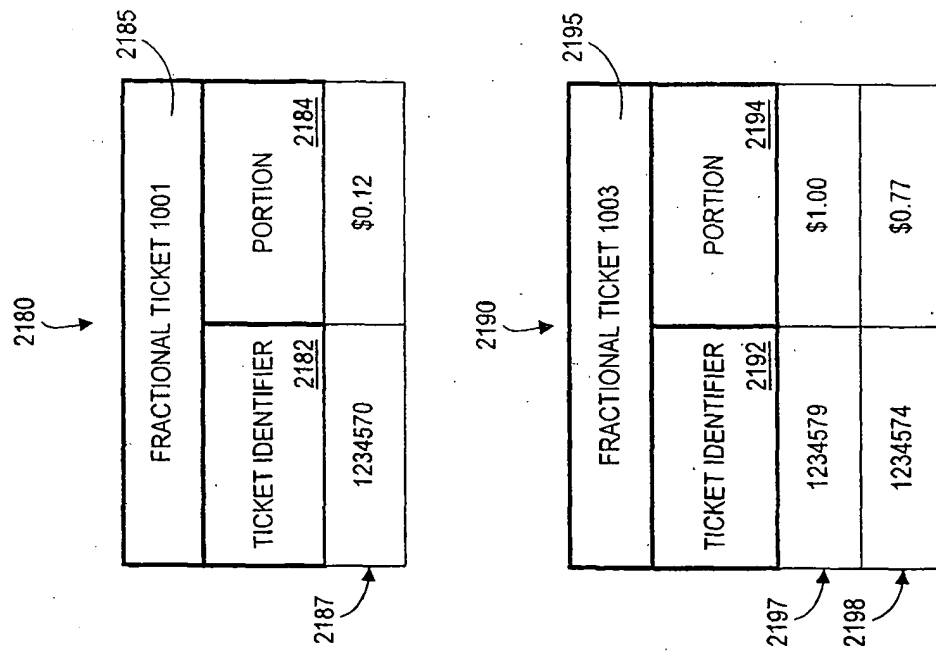


FIG. 35

38/79

2200
↓

	TICKET IDENTIFIER	DRAWING DATE	TICKET NUMBERS	UNALLOCATED PORTION	TICKET PRICE
2202	1234000	2/17/98	12,21,28, 35,38,40	\$0.55	\$1.00
2204	1234001	2/17/98	5,15,25, 35,40,41	\$0.83	\$1.00
2206	1234002	2/17/98	2,8,14, 26,39,42	\$0.95	\$1.00
2208	123003	2/17/98	10,19,24, 29,36,39	\$0.61	\$1.00

TOTAL REMAINING UNALLOCATED AMOUNT	\$2.94
--	--------

2220
↓

ROUND UP AMOUNT	\$0.60
-----------------	--------

FIG. 36

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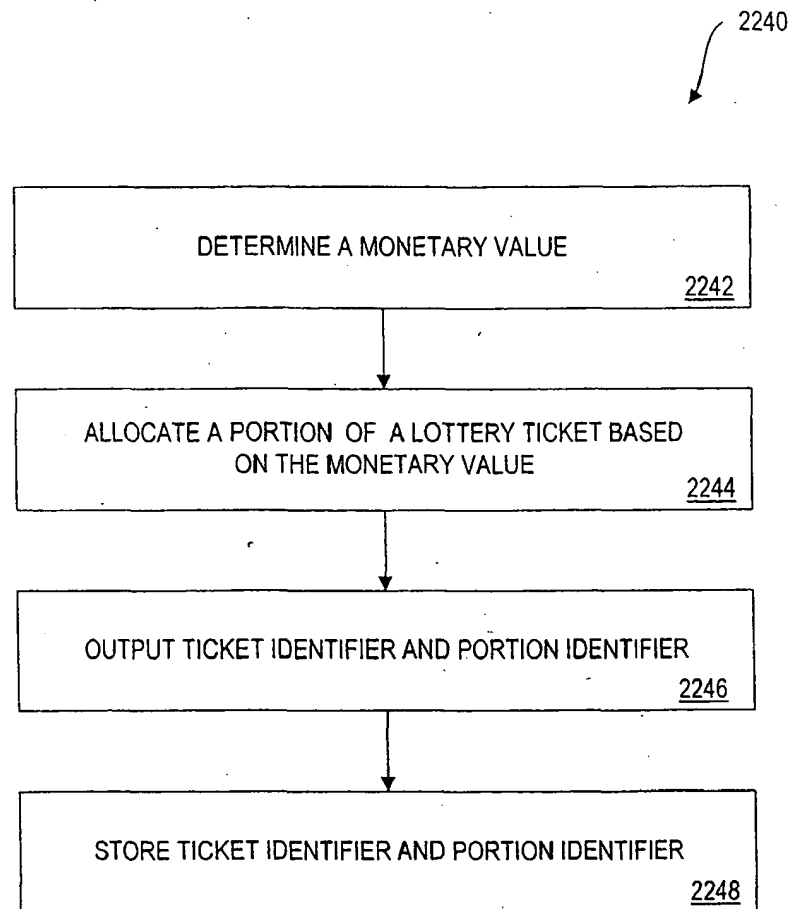


FIG. 37

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2036

DRAWING DATE	WINNING TICKET NUMBERS	PRIZE
1/7/98	02,03,12,16,21,25	\$1,000,000
1/14/98	03,04,16,21,22,24	\$2,000,000
1/21/98	01,02,03,04,11,06	\$1,500,000

2260 2262 2264

FIG. 38

41/79

2038
↓

FREQUENT SHOPPER NUMBER 2288	ADDRESS 2290	TELEPHONE 2292	NAME 2294	E-MAIL ADDRESS 2296
111111	12 MAIN ST. ANYTOWN, USA	(111)456-7890	SUSAN GREEN	-
111112	456 RIVER DR. ANYTOWN, USA	(222)234-9876	JONATHAN STEVENS	JSTEVENS@IBMI.COM
111113	5412 MADISON AVE. ANYTOWN, USA	(333)246-8108	NANCY EVANS	-
111112	99 PARK LA. ANYTOWN, USA	(444)359-6129	RALPH STEWART	-

2280 →
2282 →
2284 →
2286 →

FIG. 39

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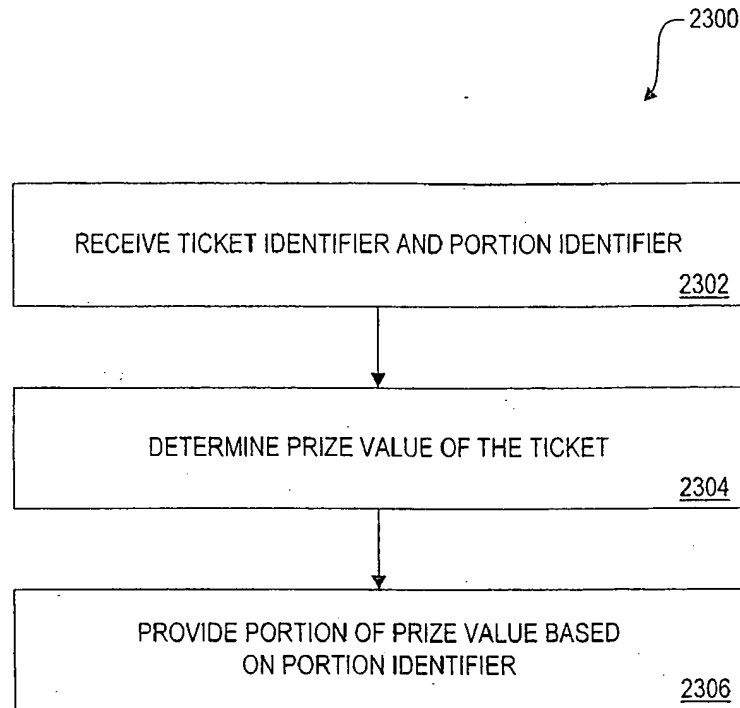


FIG. 40

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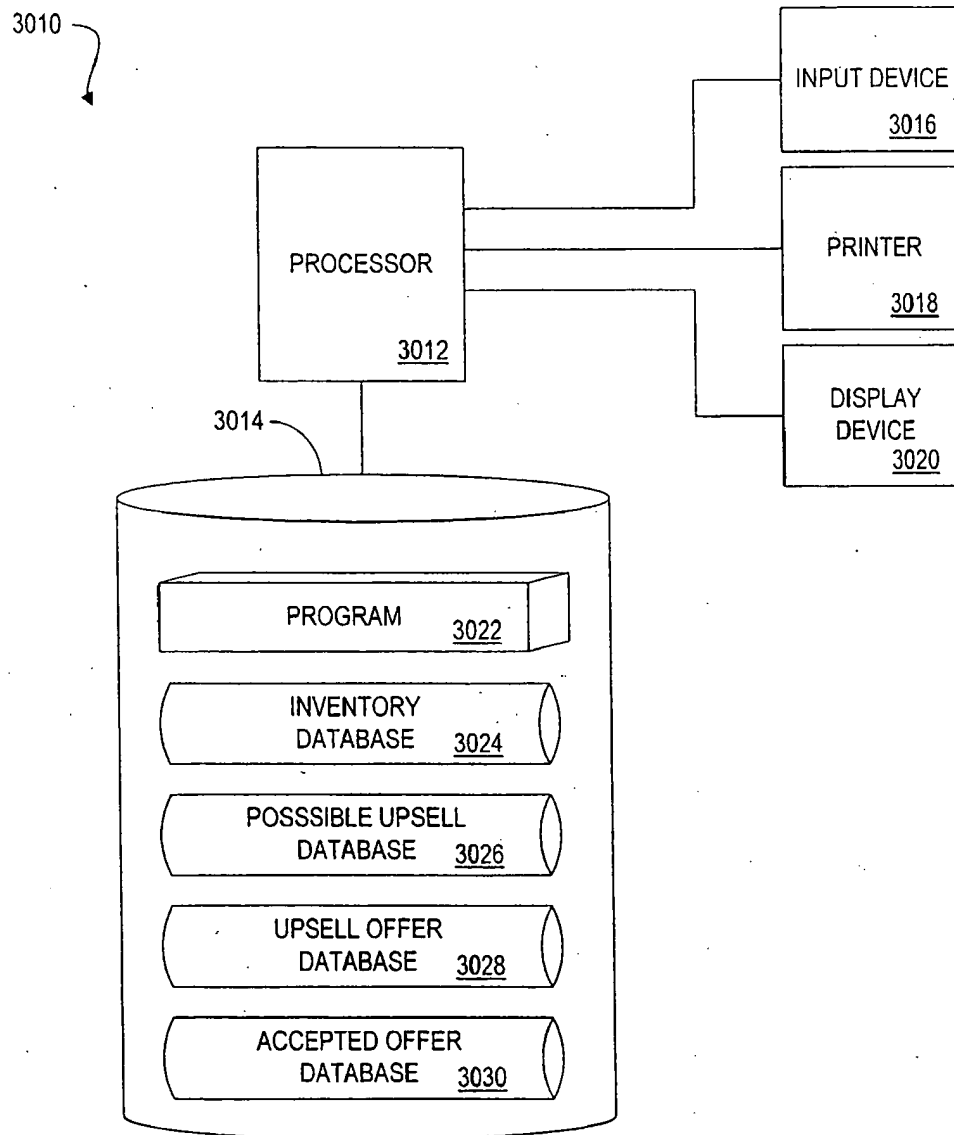


FIG. 41

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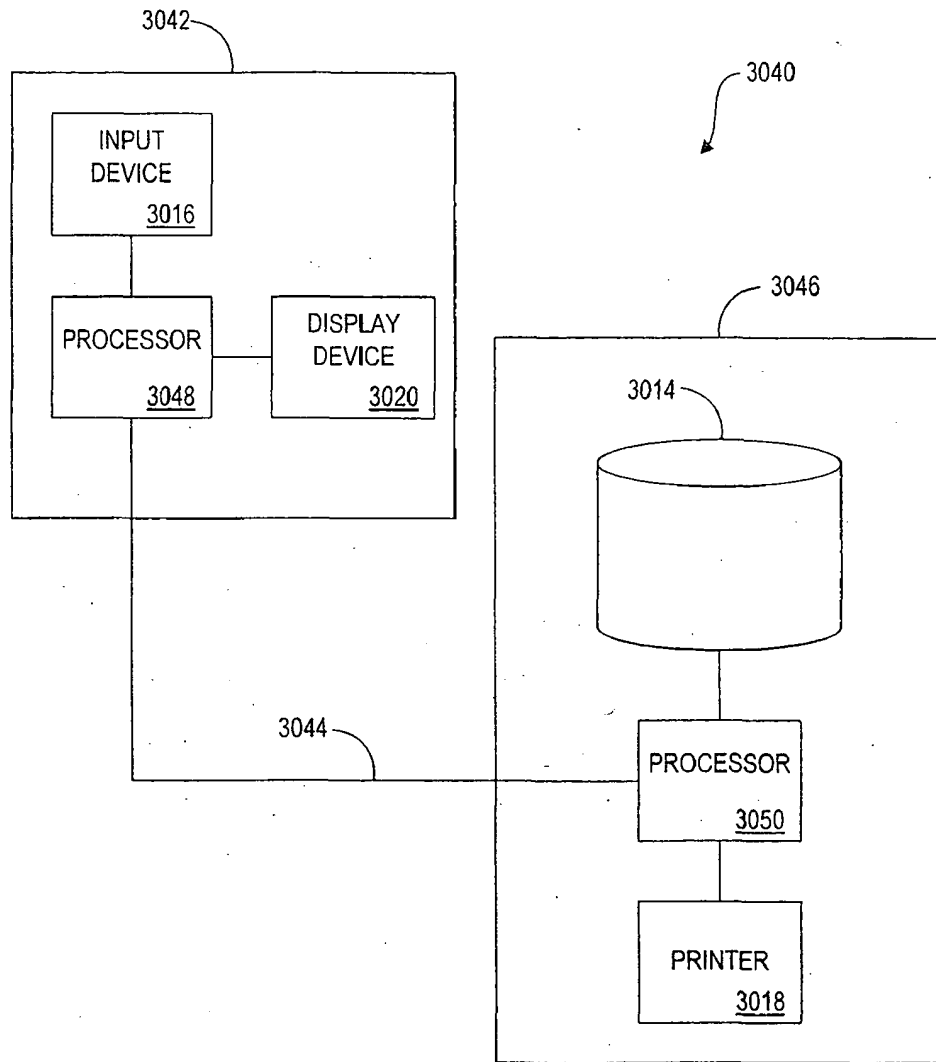


FIG. 42

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3024

ITEM IDENTIFIER 3116	ITEM DESCRIPTION 3118	ITEM PRICE 3120	ITEM COST 3122
1001	HAMBURGER	\$0.89	\$0.55
1002	APPLE PIE	\$0.89	\$0.48
1002	SMALL COLA	\$1.19	\$0.09
1004	MEDIUM COLA	\$1.29	\$0.09
1005	LARGE COLA	\$1.49	\$0.09
1004	SMALL FRENCH FRIES	\$1.09	\$0.28
1007	MEDIUM FRENCH FRIES	\$1.69	\$0.31
1008	LARGE FRENCH FRIES	\$1.49	\$0.33

3100
3102
3104
3106
3108
3110
3112
3114

FIG. 43

3026

UPSELL IDENTIFIER 3148	UPSELL DESCRIPTION 3150
A	HAMBURGER
B	SMALL COLA
C	APPLE PIE
D	UPGRADE FROM SMALL FRENCH FRIES TO LARGE FRENCH FRIES

3140
3142
3144
3146

FIG. 44

4779

3155

ITEMS INCLUDED IN PURCHASE	UPSELL(S)
1 HAMBURGER, 1 SMALL FRENCH FRIES	B
1 HAMBURGER, 1 SMALL FRENCH FRIES	D
1 SMALL FRENCH FRIES, 1 LARGE COLA	D
1 HAMBURGER, 1 LARGE COLA, 1 SMALL FRENCH FRIES	C,D
1 HAMBURGER, 1 LARGE COLA, 1 MEDIUM FRENCH FRIES	C,C
1 HAMBURGER, 1 LARGE COLA, 1 LARGE FRENCH FRIES	C

3160

3162

3164

3166

3168

3170

FIG. 45

48/79

3180

ITEMS INCLUDED IN PURCHASE 3202	UPSELL(S) 3204	ROUNDED PRICE 3206
1 HAMBURGER, 1 SMALL FRENCH FRIES 3190	B	\$2.00
1 HAMBURGER, 1 SMALL FRENCH FRIES 3192	D	\$2.00
1 SMALL FRENCH FRIES, 1 LARGE COLA 3194	D	\$3.00
1 HAMBURGER, 1 LARGE COLA, 1 SMALL FRENCH FRIES 3196	C,D	\$4.00
1 HAMBURGER, 1 LARGE COLA, 1 MEDIUM FRENCH FRIES 3198	C,C	\$5.00
1 HAMBURGER, 1 LARGE COLA, 1 LARGE FRENCH FRIES 3200	C,C	\$5.00

FIG. 46

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3220

	ITEMS INCLUDED IN PURCHASE 3234	UPSELL(S) 3236	UPSELL PRICE 3238
3222	1 HAMBURGER, 1 SMALL FRENCH FRIES	B	\$0.02
3224	1 HAMBURGER, 1 SMALL FRENCH FRIES	D	\$0.02
3226	1 SMALL FRENCH FRIES, 1 LARGE COLA	D	\$0.02
3228	1 HAMBURGER, 1 LARGE COLA, 1 SMALL FRENCH FRIES	C,D	\$0.53
3230	1 HAMBURGER, 1 LARGE COLA, 1 MEDIUM FRENCH FRIES	C,C	\$0.93
3232	1 HAMBURGER, 1 LARGE COLA, 1 LARGE FRENCH FRIES	C	\$0.73

FIG. 47

3250

ITEMS INCLUDED IN PURCHASE 3264	UPSELL(S) 3266	ROUNDING MULTIPLE 3268
1 HAMBURGER, 1 SMALL FRENCH FRIES 3252	B	\$1.00
1 HAMBURGER, 1 SMALL FRENCH FRIES 3254	D	\$1.00
1 SMALL FRENCH FRIES, 1 LARGE COLA 3256	D	\$1.00
1 HAMBURGER, 1 LARGE COLA, 1 SMALL FRENCH FRIES 3258	C,D	\$1.00
1 HAMBURGER, 1 LARGE COLA, 1 MEDIUM FRENCH FRIES 3260	C,C	\$1.00
1 HAMBURGER, 1 LARGE COLA, 1 LARGE FRENCH FRIES 3262	C	\$1.00

FIG. 48

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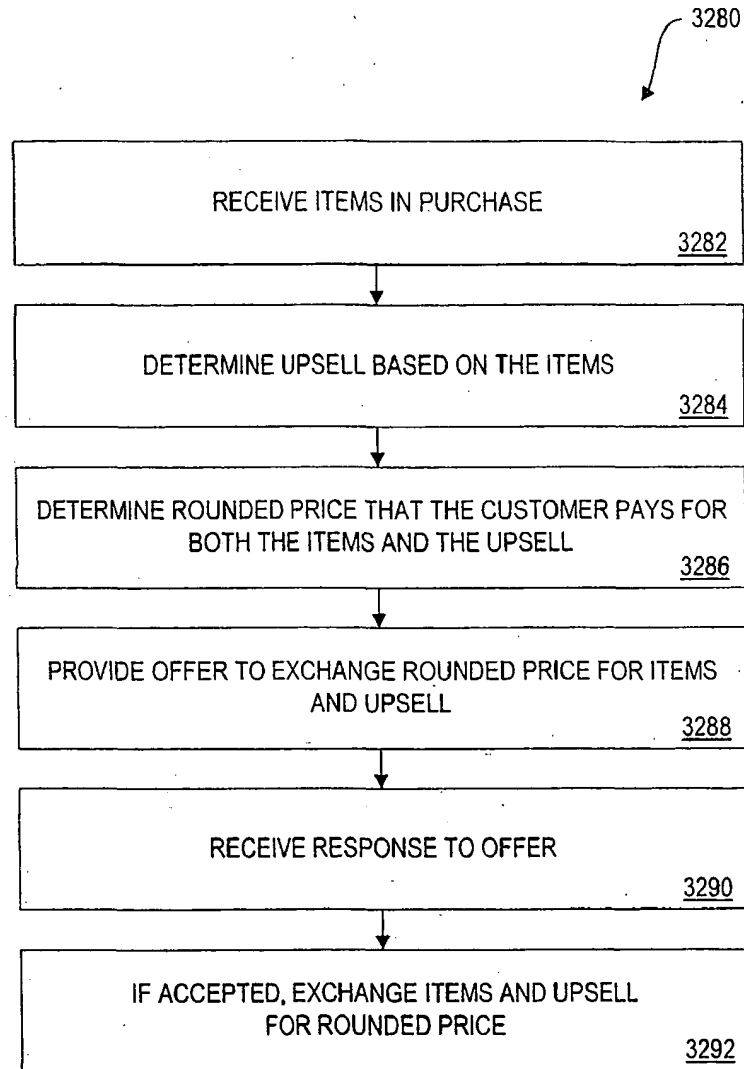


FIG. 49

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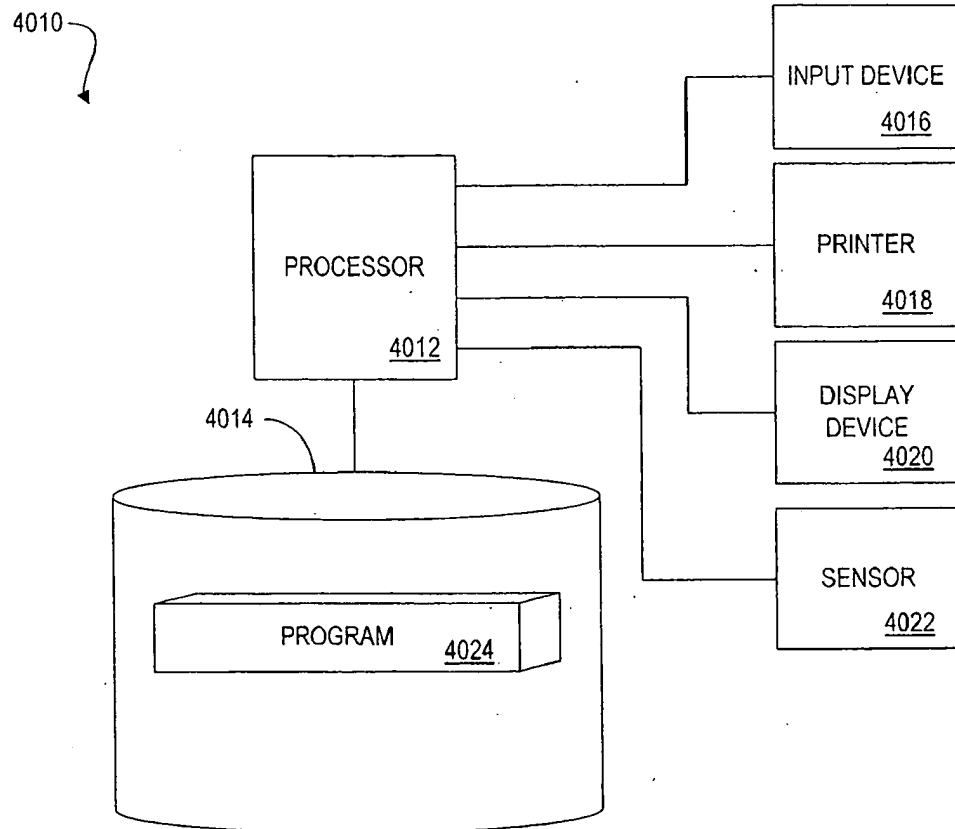


FIG. 50

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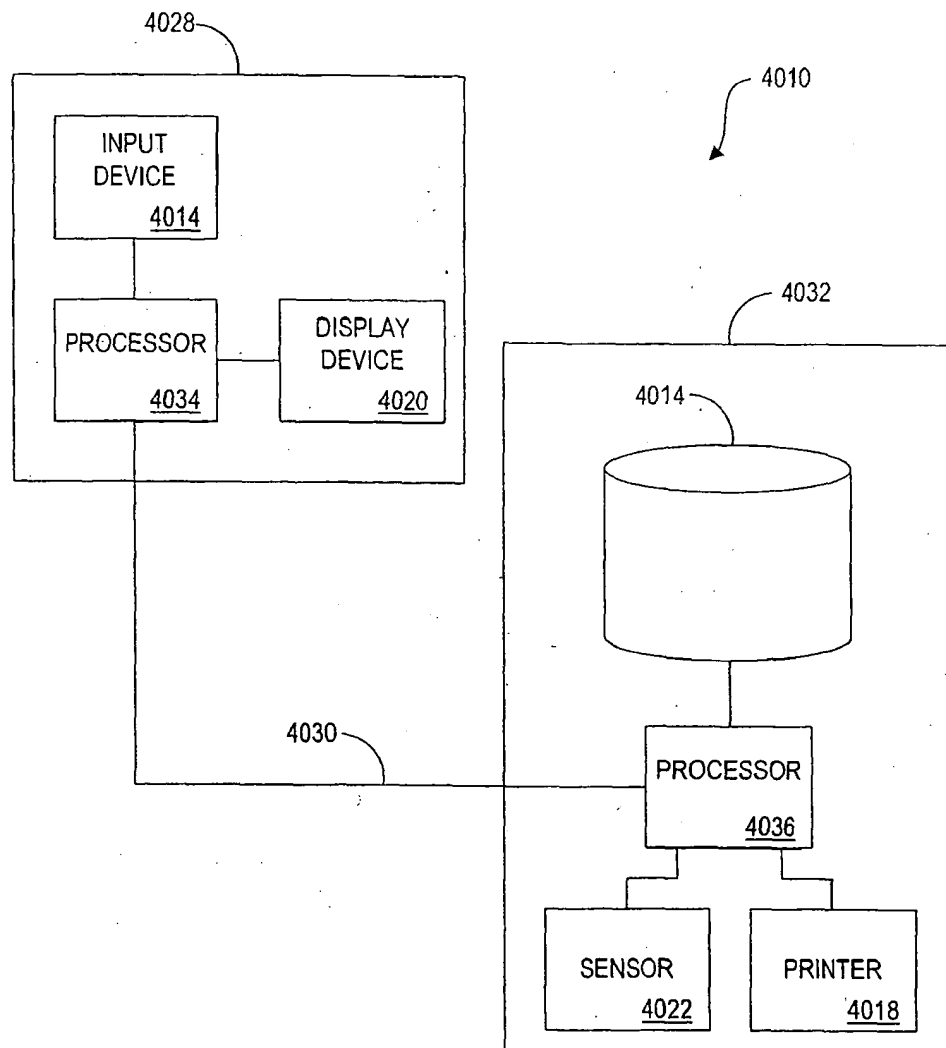


FIG. 51

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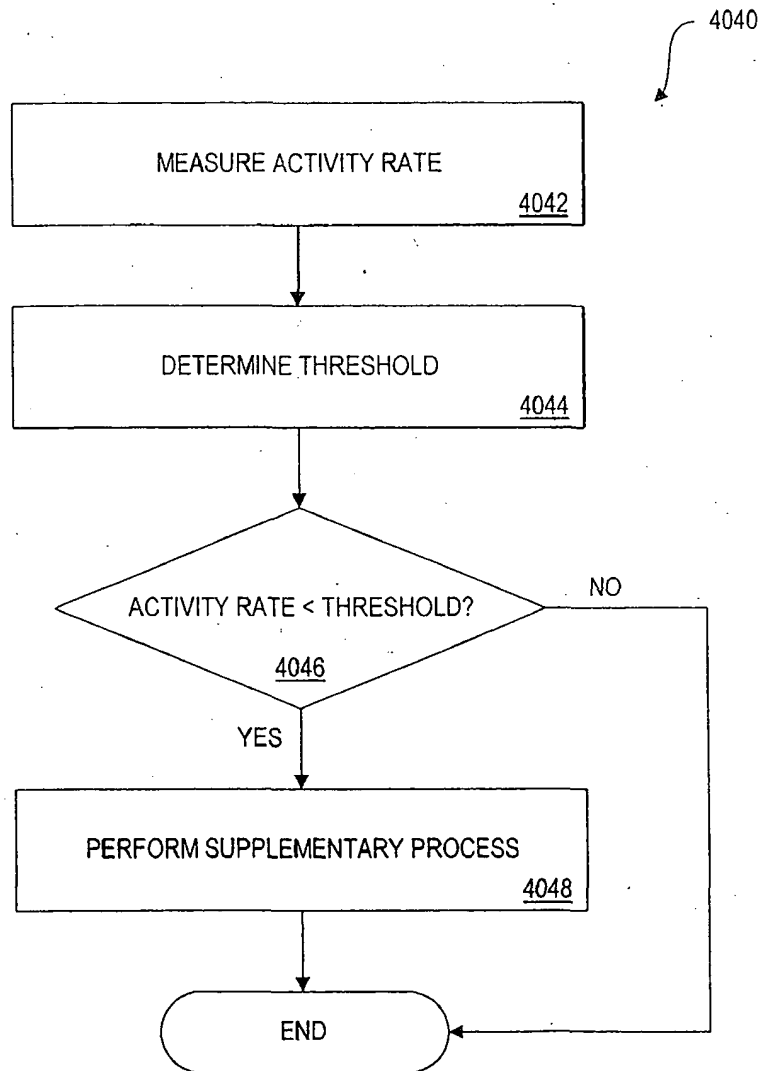


FIG. 52

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4060

ACTIVITY RATE IDENTIFIER	ACTIVITY RATE (TRANSACTIONS PER 15 MINUTE PERIOD)	UPSELL TO OFFER
A	LESS THAN 8	AN ADDITIONAL PRODUCT
B	BETWEEN 8 AND 15	"TRIPLE-YOUR-CHANGE" COUPON
C	MORE THAN 15	NONE

FIG. 53

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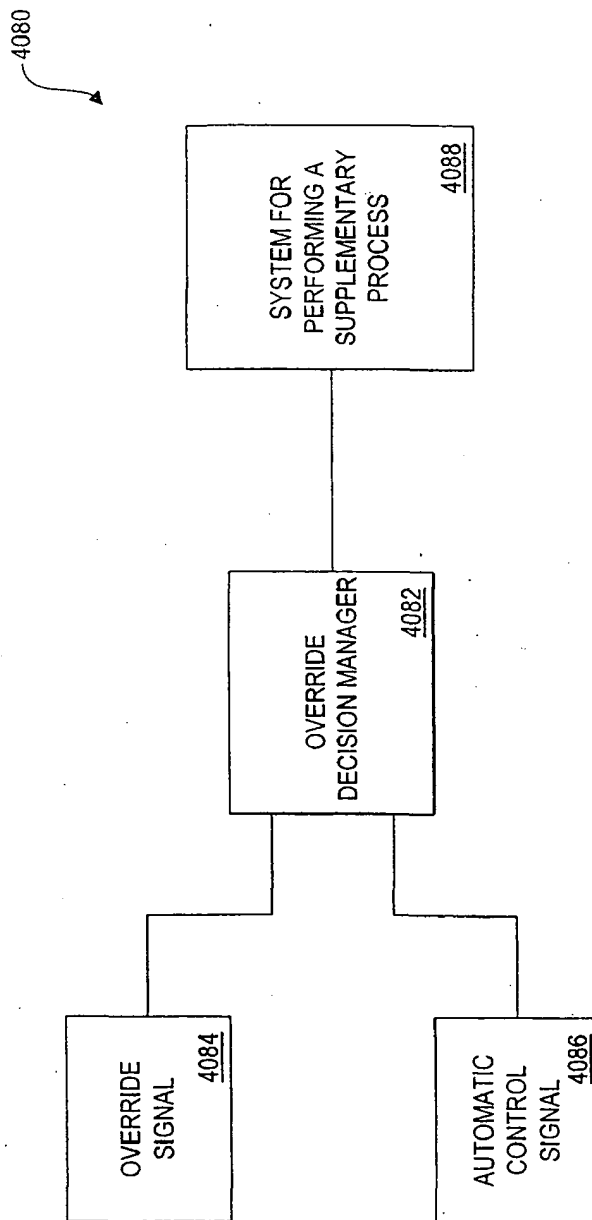


FIG. 54

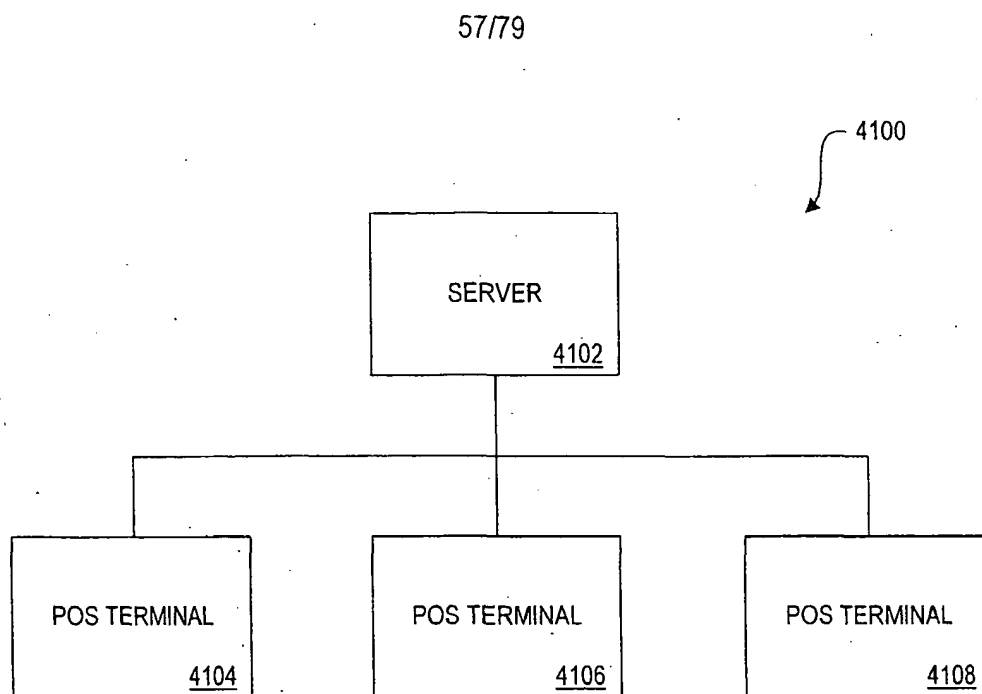


FIG. 55

4120
(

ACTIVITY RATE IDENTIFIER 4122	ACTIVITY RATE (% ALL POS TERMINALS IN USE) 4124	UPSELL TO OFFER 4126
A	LESS THAN 50%	ONE FROM A GROUP OF THREE ADDITIONAL PRODUCTS
B	BETWEEN 50% AND 80%	AN ADDITIONAL PRODUCT
C	BETWEEN 81% AND 90%	"TRIPLE-YOUR-CHANGE" COUPON
D	MORE THAN 90%	NONE

4128

4130

4132

4134

FIG. 56

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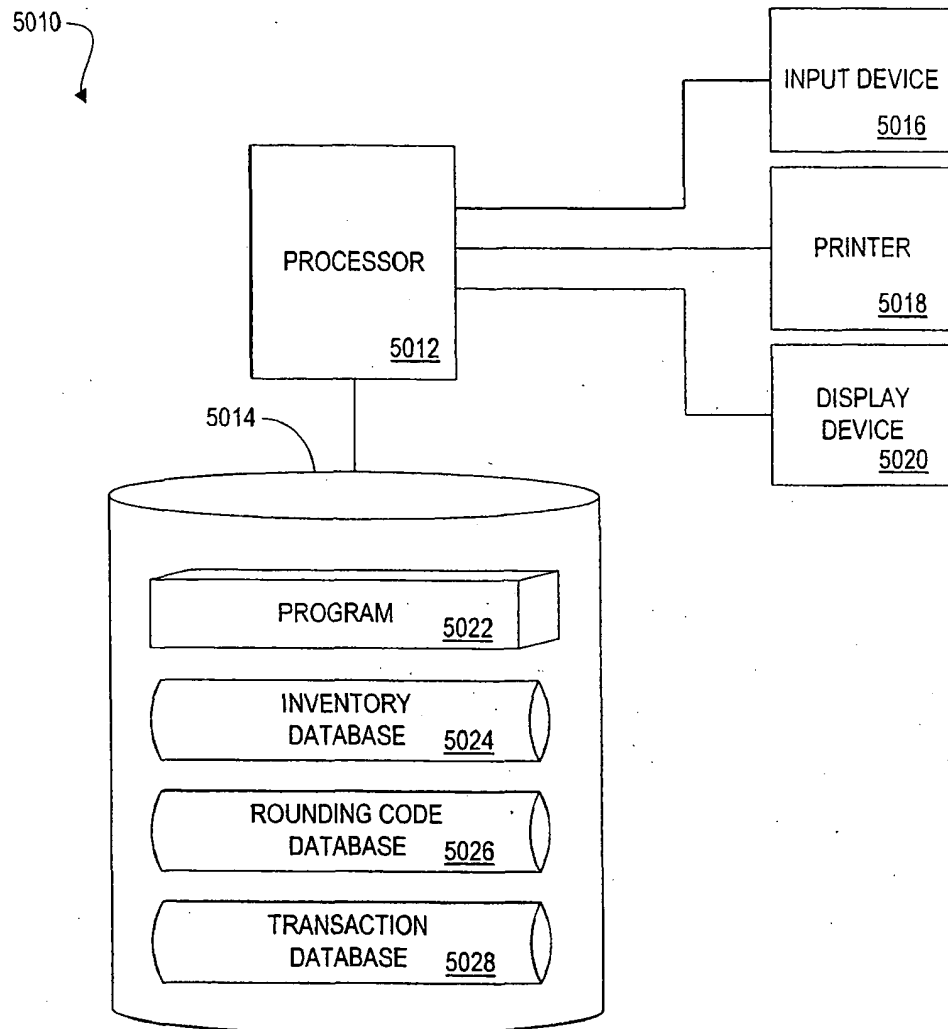


FIG. 57

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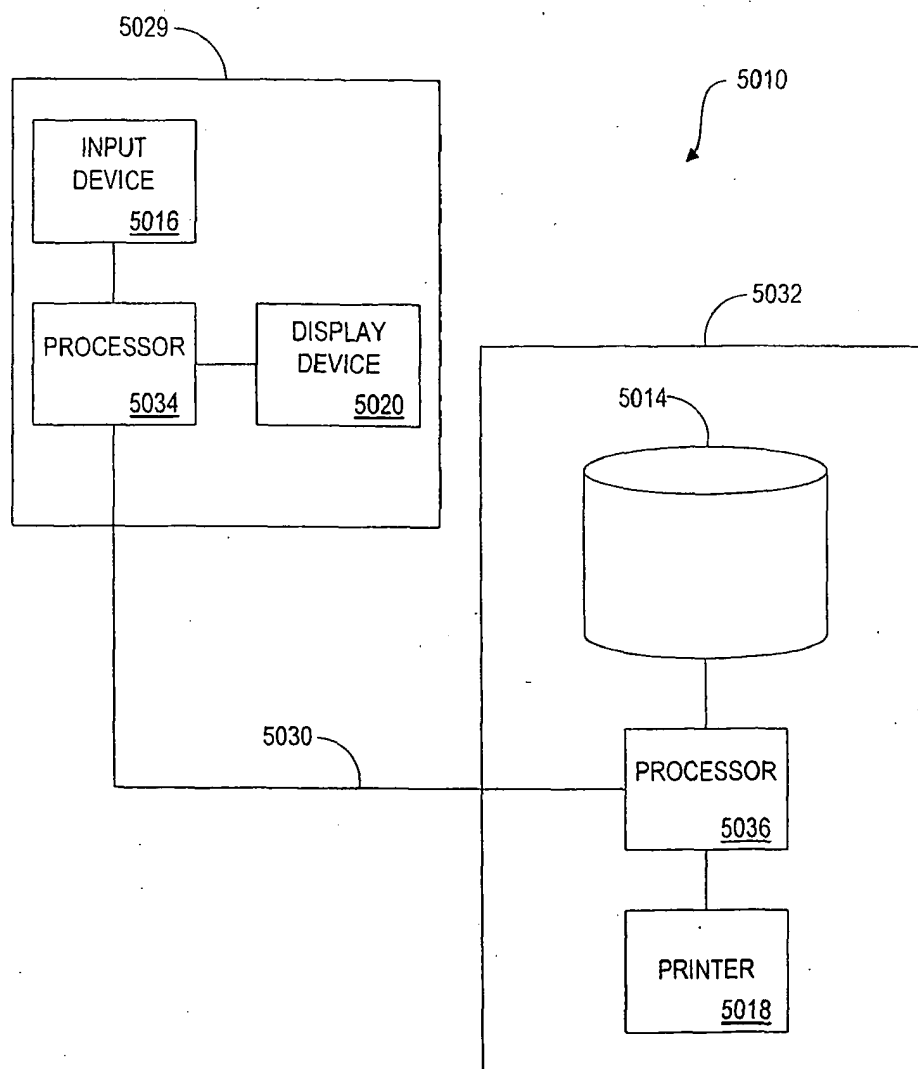


FIG. 58

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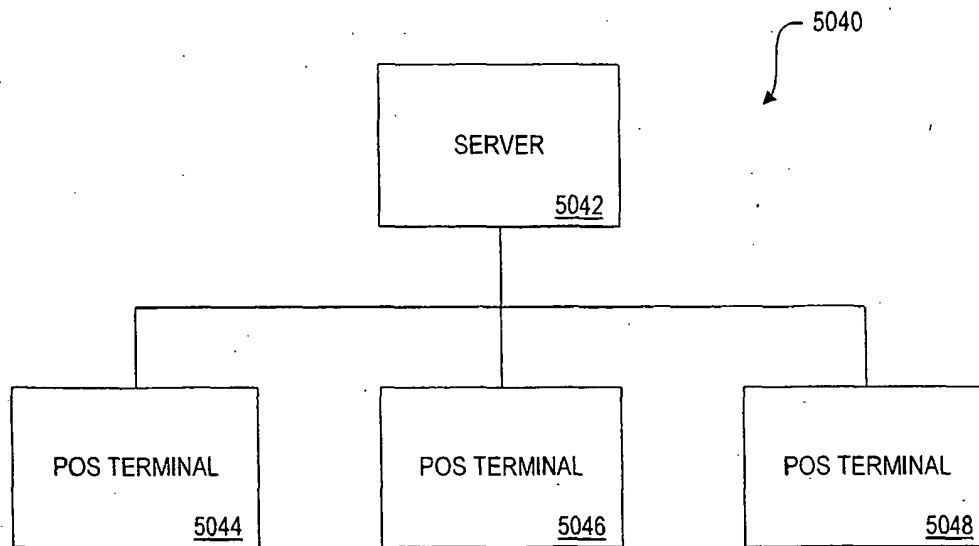


FIG. 59

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5024
→

ITEM IDENTIFIER	DESCRIPTION	PRICE	TAXABLE STATUS
112230	1998 CALENDER	\$9.95	YES
112231	1996 TAX MANUAL	\$34.00	YES
112232	OCTOBER '97 WEB MAGAZINE	\$2.95	YES
112232	WAR AND PEACE	\$15.00	YES
112231	BIBLE	\$30.00	YES
112231	COLLEGE GUIDE	\$17.50	YES
112236	PATENT LAW 2000	\$1.50	YES

5032

5033

5034

5035

5036

5037

5038

FIG. 60

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5026

ROUNDING CODE IDENTIFIER	ROUNDING MULTIPLE	FIXED VALUE
5050	5056	5060
5052	\$1	\$1
5054	\$5	\$5
	\$10	\$10

FIG. 61

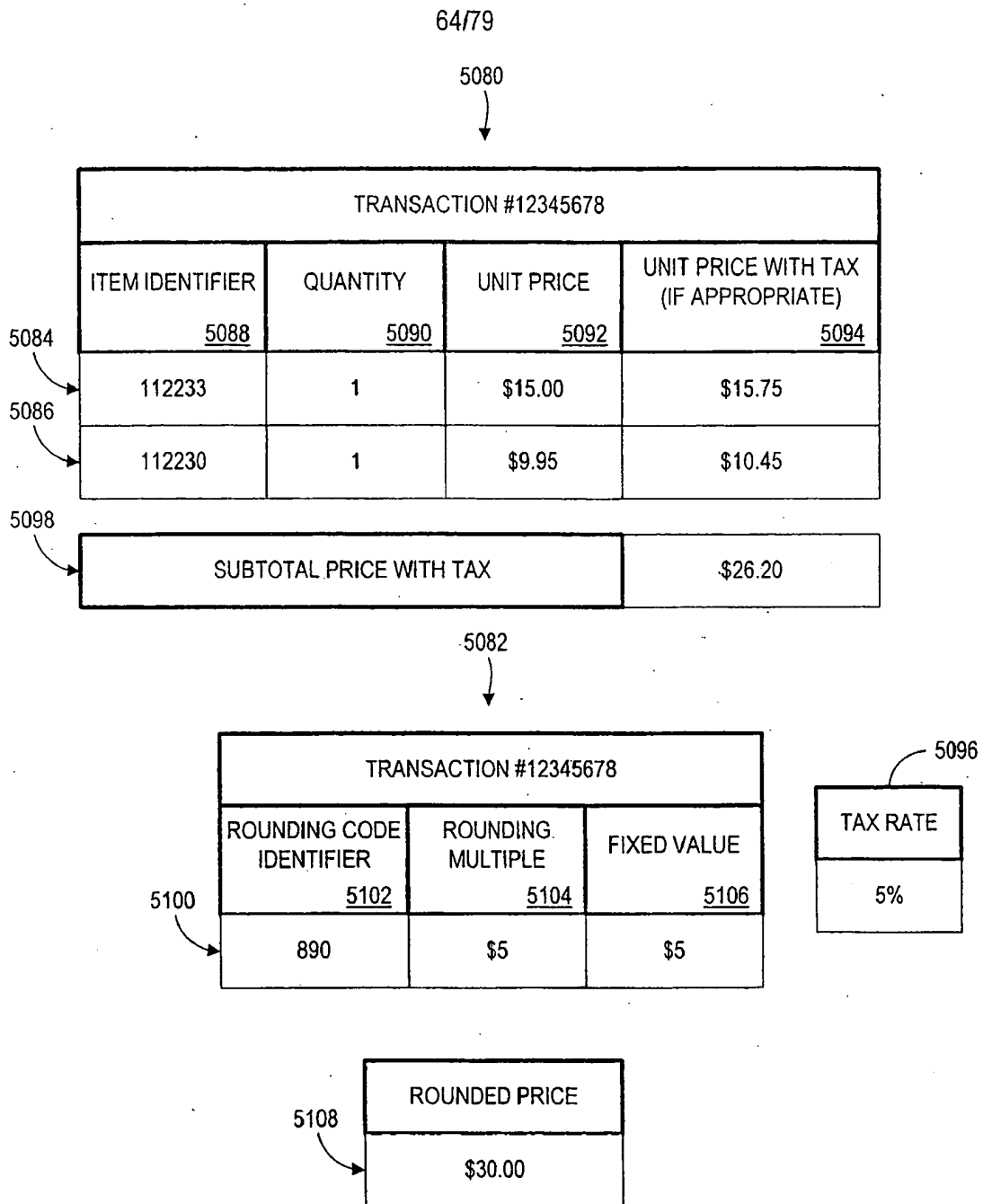


FIG. 62

65/79

5120
↘

TRANSACTION IDENTIFIER	DATE	TIME	POS TERMINAL IDENTIFIER	REVENUE
5126 12345678	5128 12/1/99	5130 10:04 AM	5132 7	5134 \$30.00
5124 12345679	12/1/99	11:15 AM	7	\$4.28

5122
↗

5124
↗

FIG. 63

66/79

5150

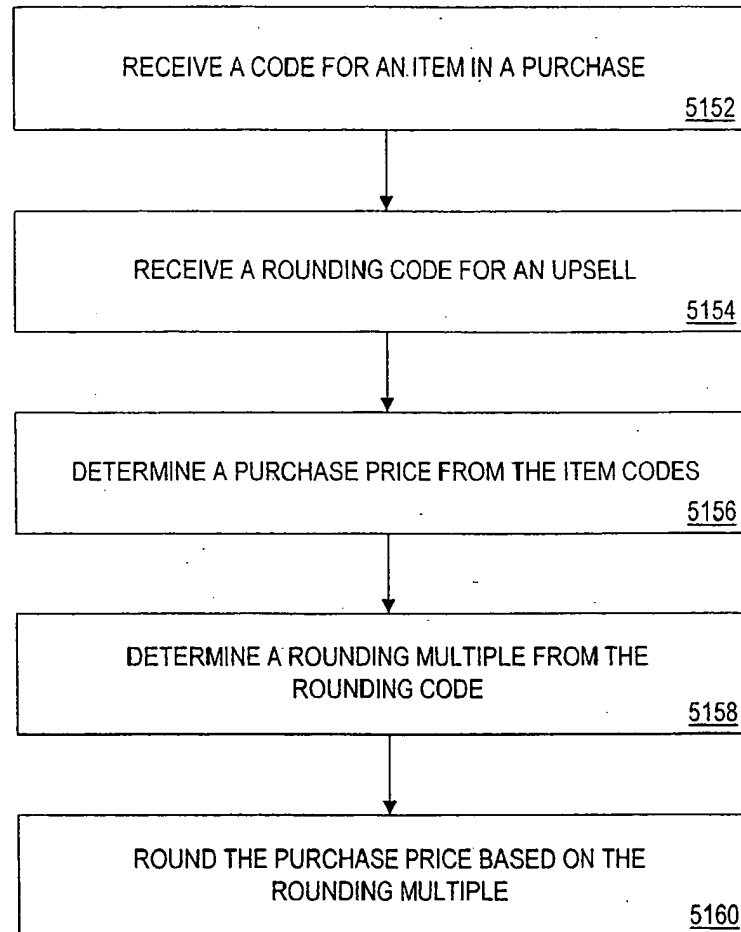


FIG. 64

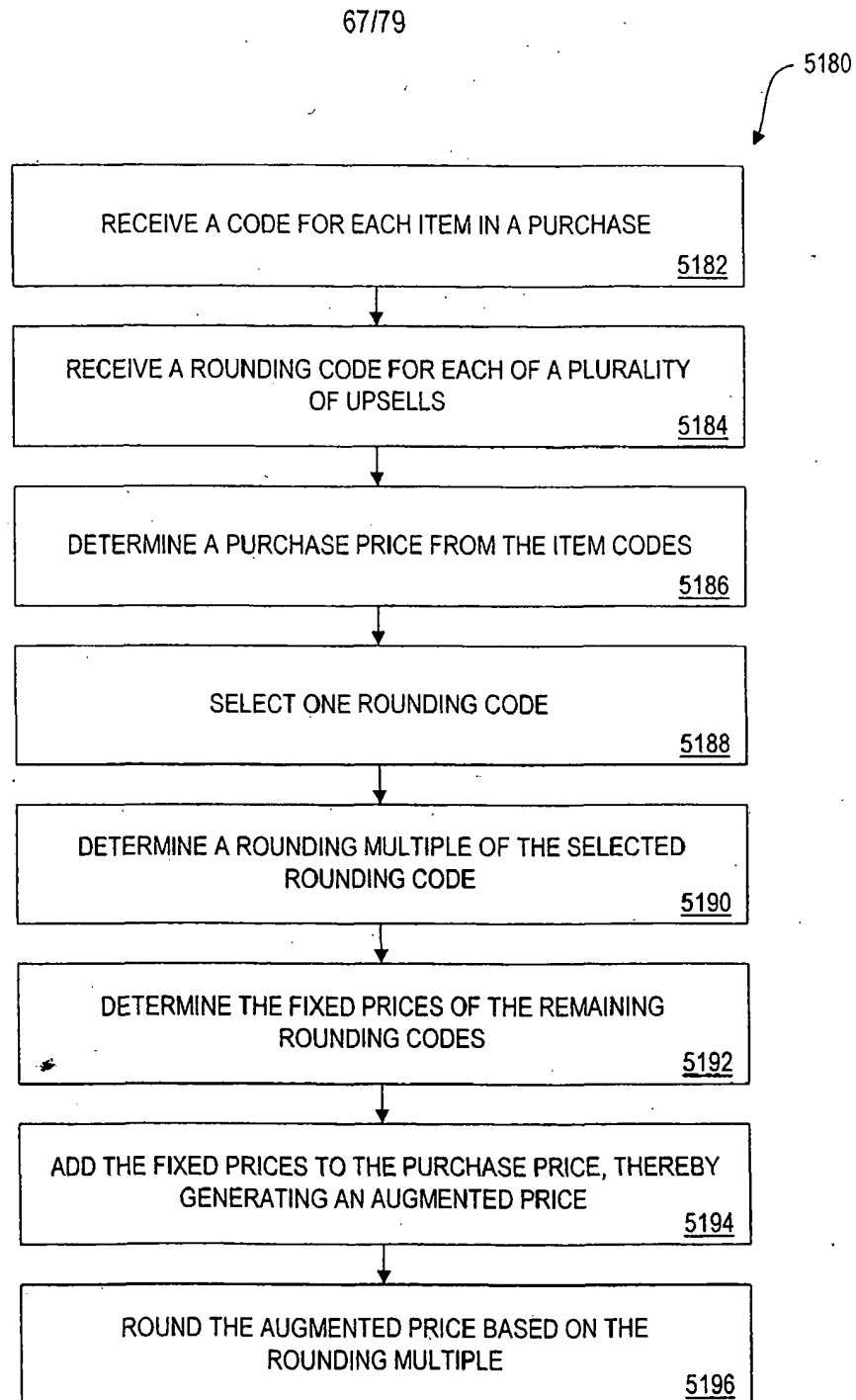


FIG. 65

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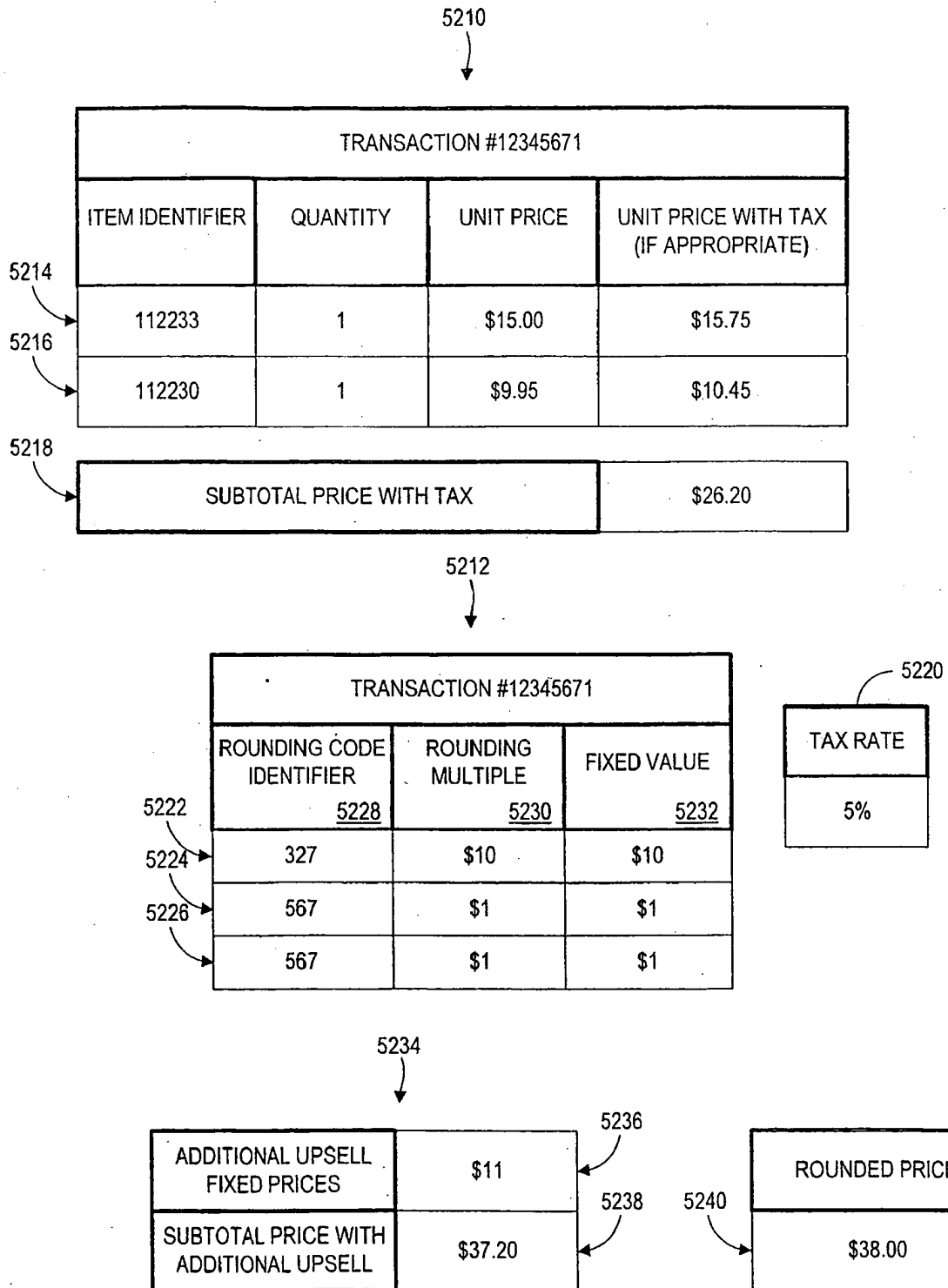


FIG. 66

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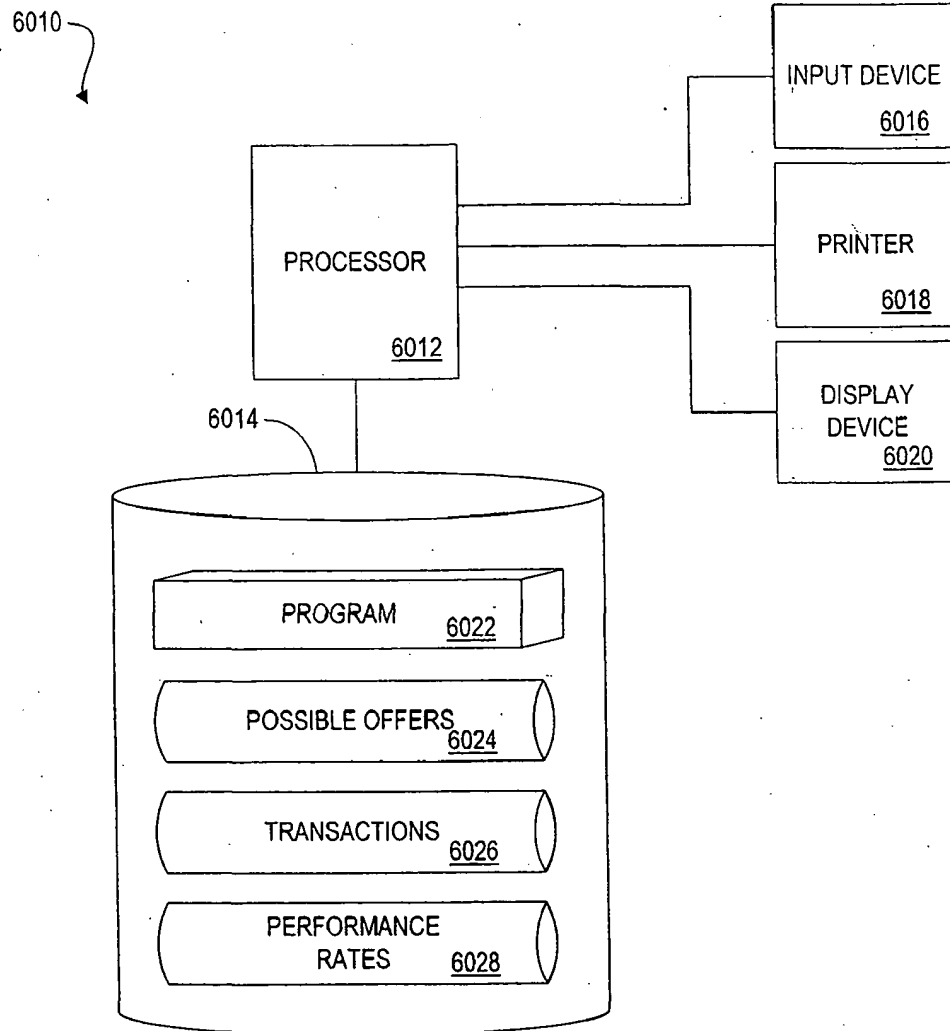


FIG. 67

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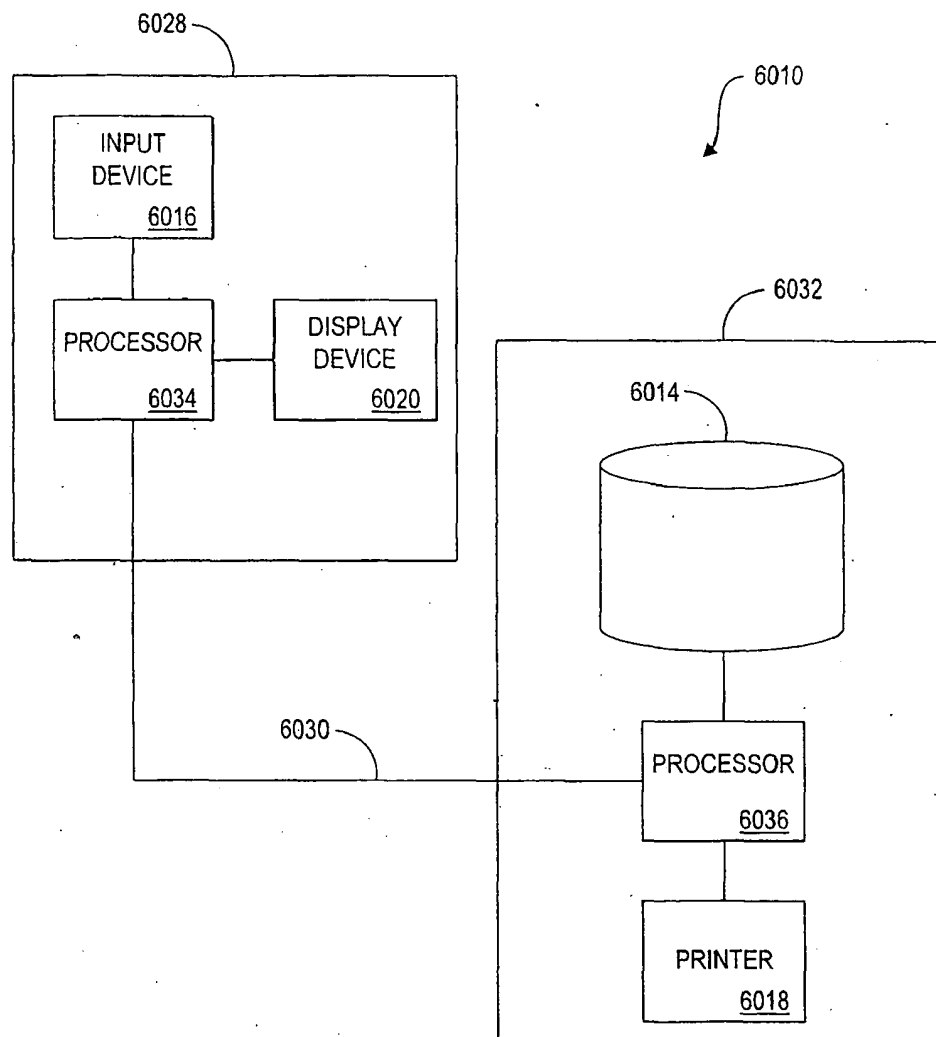


FIG. 68

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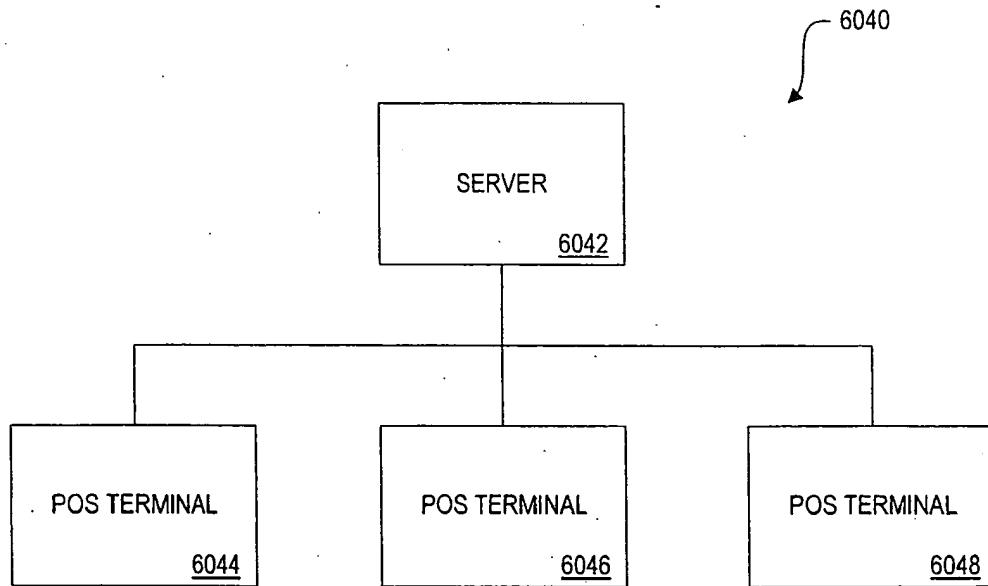


FIG. 69

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6060

OFFER IDENTIFIER 6070	OFFER DESCRIPTION 6072	COST OF OFFER 6074	OFFER FREQUENCY 6076
A	LOTTERY TICKET	\$1.00	25%
B	COUPON	\$0.42	25%
C	UNSOLD MAGAZINE	\$0.52	25%
D	FREE MEAL	\$0.87	25%

6062

6064

6066

6068

FIG. 70

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6090

POS TERMINAL #7							6092
TRANSACTION IDENTIFIER 6100	DATE 6102	TIME 6104	PURCHASE DESCRIPTION 6106	OFFER IDENTIFIER 6108	OFFER ACCEPTED 6110	REVENUE FROM OFFER 6112	
12345670	1/30	8:00 AM	ITEMS X,Y,Z	A	NO		
12345671	1/31	12:45 PM	ITEMS A,B,C,D	C	YES	\$0.78	
12345672	1/31	3:00 PM	ITEMS C,D BY CUSTOMER 7203	C	YES	\$0.73	

6094

6096

6098

FIG. 71

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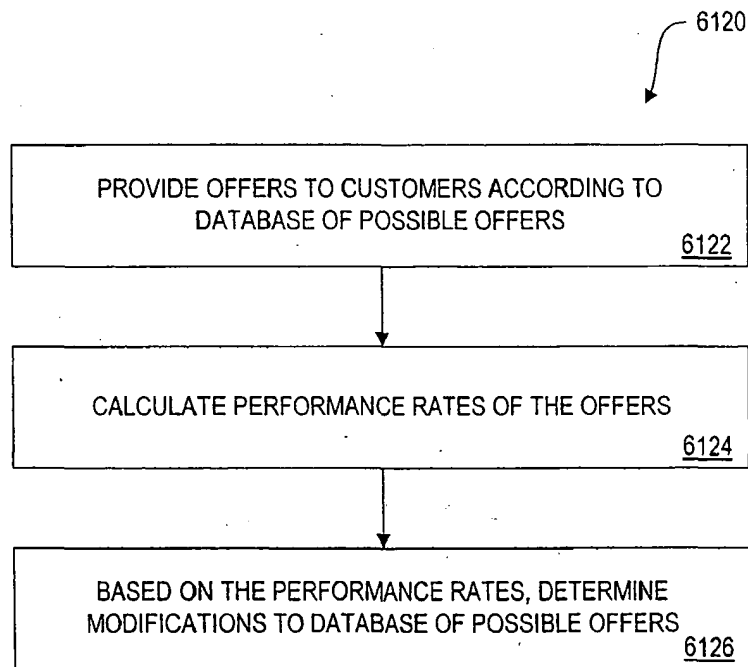


FIG. 72

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6140

OFFER IDENTIFIER 6150	NUMBER OF TIMES ACCEPTED 6152	NUMBER OF TIMES PROVIDED 6154	ACCEPTANCE RATE 6156
A	204	1,000	20.4%
B	49	330	14.8%
C	17	392	4.3%
D	76	900	8.4%

6142 6144 6146 6148

FIG. 73

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6170

OFFER IDENTIFIER 6180	NUMBER OF TIMES ACCEPTED 6182	NUMBER OF TIMES PROVIDED 6184	AVERAGE REVENUE PER ACCEPTED OFFER 6186	AVERAGE PROFIT PER ACCEPTED OFFER 6188	AVERAGE PROFIT PER OFFER 6190
A	204	1,000	\$1.50	\$0.50	\$0.102
B	49	330	\$0.78	\$0.36	\$0.053
A	17	330	\$1.00	\$0.48	\$0.021
A	76	900	\$0.95	\$0.48	\$0.007

6172

6174

6176

6178

FIG. 74

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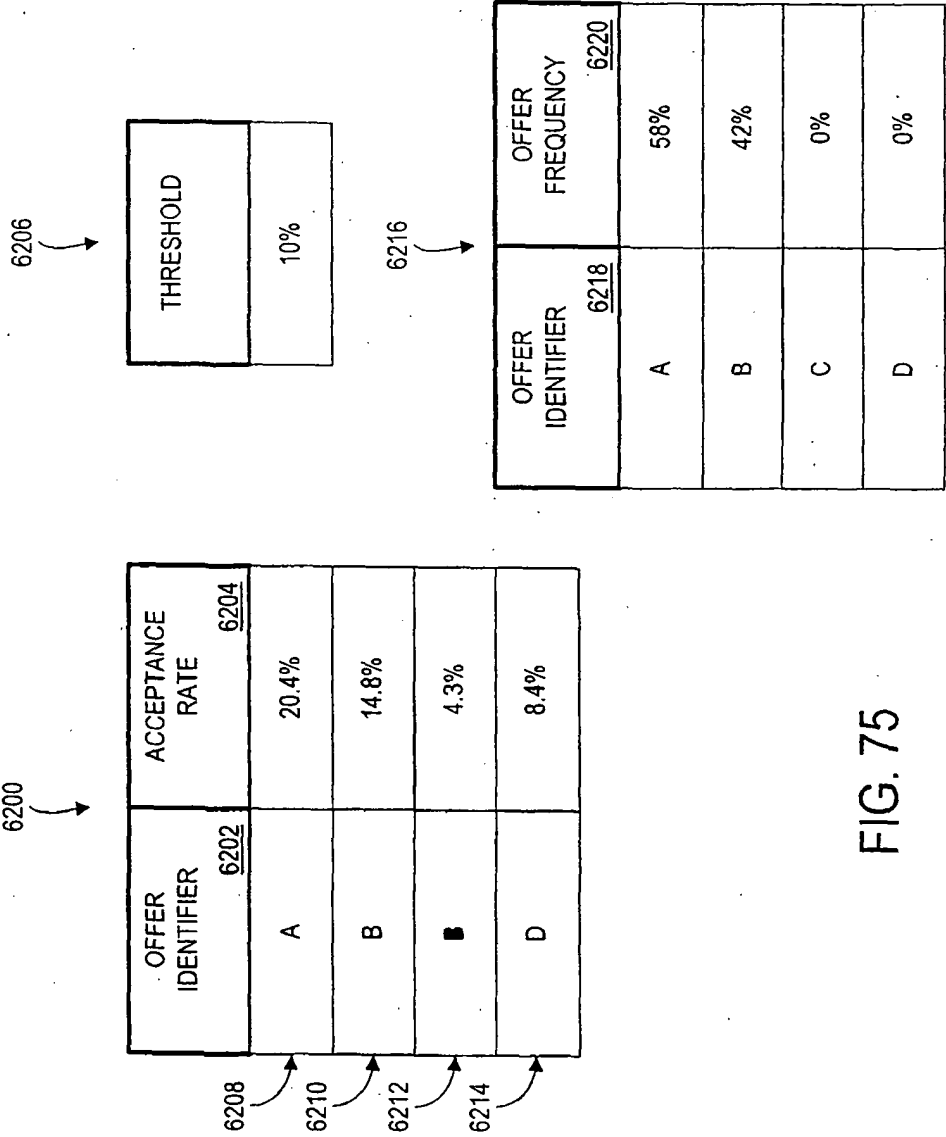


FIG. 75

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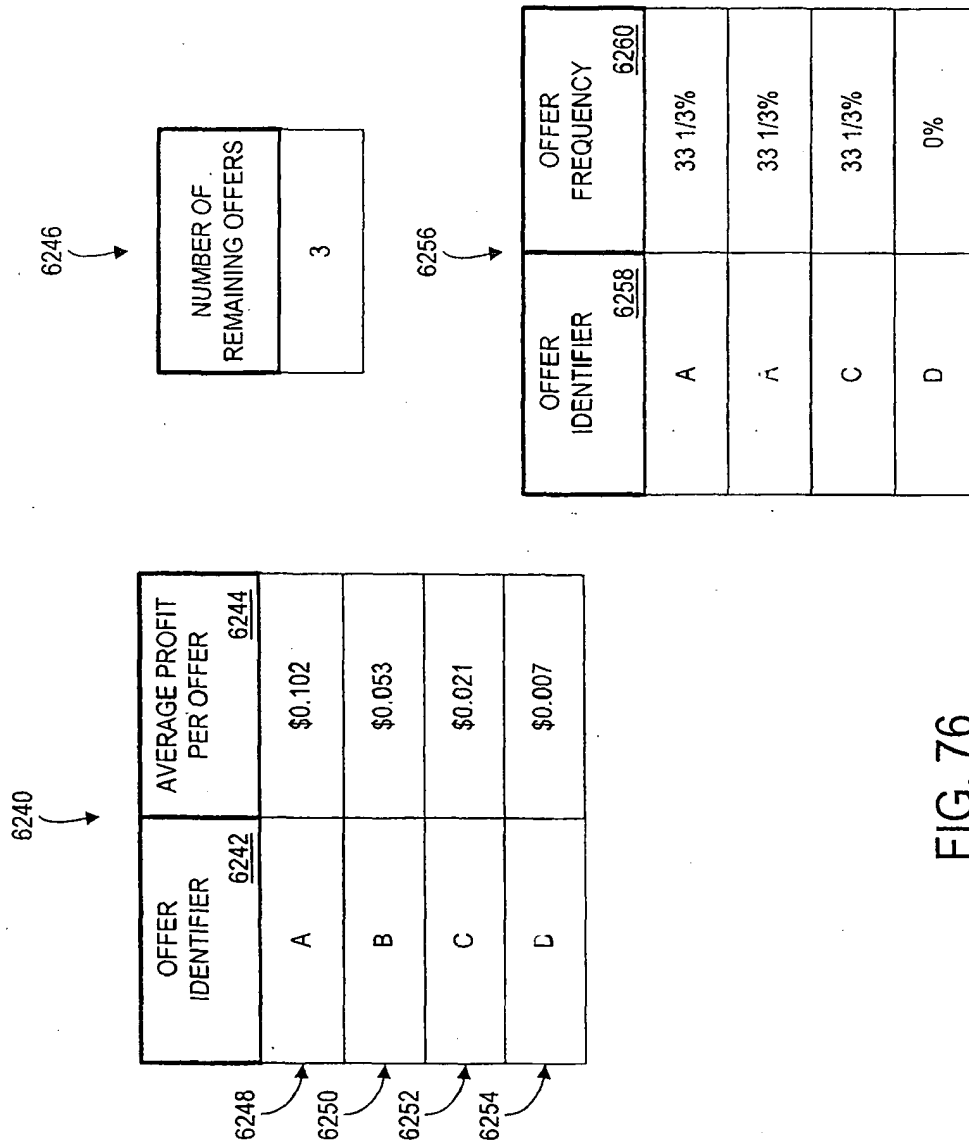


FIG. 76

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6300
↓

OFFER IDENTIFIER 6310	OFFER DESCRIPTION 6312	COST OF OFFER 6314	OFFER FREQUENCY 6316	FREQUENCY FIXED 6318
A	LOTTERY TICKET	\$1.00	33%	NO
B	COUPON	\$0.42	33%	NO
C	UNSOLD MAGAZINE	\$0.52	33%	NO
D	\$50.00 GIFT CERTIFICATE	\$50.00	1%	YES

6302

6304

6306

6308

FIG. 77



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G06F 17/60, H04K 1/02	A3	(11) International Publication Number: WO 98/43149 (43) International Publication Date: 1 October 1998 (01.10.98)																								
(21) International Application Number: PCT/US98/05787 (22) International Filing Date: 20 March 1998 (20.03.98) (30) Priority Data: <table border="0"> <tr> <td>08/822,709</td> <td>21 March 1997 (21.03.97)</td> <td>US</td> </tr> <tr> <td>08/841,791</td> <td>5 May 1997 (05.05.97)</td> <td>US</td> </tr> <tr> <td>08/920,116</td> <td>26 August 1997 (26.08.97)</td> <td>US</td> </tr> <tr> <td>09/045,386</td> <td>20 March 1998 (20.03.98)</td> <td>US</td> </tr> <tr> <td>09/045,036</td> <td>20 March 1998 (20.03.98)</td> <td>US</td> </tr> <tr> <td>09/045,347</td> <td>20 March 1998 (20.03.98)</td> <td>US</td> </tr> <tr> <td>09/045,518</td> <td>20 March 1998 (20.03.98)</td> <td>US</td> </tr> <tr> <td>09/045,084</td> <td>20 March 1998 (20.03.98)</td> <td>US</td> </tr> </table> (71) Applicant: WALKER ASSET MANAGEMENT LIMITED PARTNERSHIP [US/US]; Four High Ridge Park, Stamford, CT 06905-1325 (US). (72) Inventors: WALKER, Jay, S.; 124 Spectacle Lane, Ridgefield, CT 06877 (US). VAN LUCHENE, Andrew, S.; 13-2a Clamore Drive, Norwalk, CT 06850 (US). JORASCH, James, A.; Apartment 5G, 25 Forest Street, Stamford, CT 06901 (US). JINDAL, Sanjay, K.; 52 Village Walk, Wilton, CT 06987 (US). ALDERUCCI, Dean, A.; 19-8 Prospect Ridge Road, Ridgefield, CT 06877 (US).		08/822,709	21 March 1997 (21.03.97)	US	08/841,791	5 May 1997 (05.05.97)	US	08/920,116	26 August 1997 (26.08.97)	US	09/045,386	20 March 1998 (20.03.98)	US	09/045,036	20 March 1998 (20.03.98)	US	09/045,347	20 March 1998 (20.03.98)	US	09/045,518	20 March 1998 (20.03.98)	US	09/045,084	20 March 1998 (20.03.98)	US	(74) Agents: ALDERUCCI, Dean et al.; Walker Digital Corporation, Intellectual Property Dept., Five High Ridge Park, Stamford, CT 06905-1326 (US). (81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 1 July 1999 (01.07.99)
08/822,709	21 March 1997 (21.03.97)	US																								
08/841,791	5 May 1997 (05.05.97)	US																								
08/920,116	26 August 1997 (26.08.97)	US																								
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09/045,518	20 March 1998 (20.03.98)	US																								
09/045,084	20 March 1998 (20.03.98)	US																								
(54) Title: METHOD AND SYSTEM FOR PROCESSING SUPPLEMENTARY PRODUCT SALES AT A POINT-OF-SALE TERMINAL (57) Abstract <p>A POS terminal determines an upsell to offer in exchange for the change due to a customer in connection with a purchase. The point-of-sale terminal preferably maintains a database of at least one upsell price and a corresponding upsell to offer a customer in exchange for the change due to him. If the customer accepts the upsell, the cashier so indicates by pressing a selection button on the POS terminal. The required payment amount for the customer to pay is then set equal to the rounded price, rather than the purchase price. Thus, the customer receives the upsell in exchange for the coins due to him, and the coins need not be exchanged between the customer and the POS terminal.</p>																										

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DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

INTERNATIONAL SEARCH REPORT

 International application No.
 PCT/US98/05787

A. CLASSIFICATION OF SUBJECT MATTER IPC(6) : G06F 17/60; H04K 1/02 US CL : 705/14,16; 380/9 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : US: 705/14,16; 380/9 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,993,714 A (GOLIGHTLY) 19 FEBRUARY 1991, the whole document, teaching lotto and merchandize POS.	1-49
X -- Y	WINN-DIXIE/THE SALVATION ARMY REPORT ... ETC, FINANCIAL NEWS, 10 JUNE 1993, the whole document.	49-228,265-284,321-344,363-370 ----- 309,310,361,362
X	SAVE THE MARK, FINANCIAL TIMES, 01 FEBRUARY 1983, the whole document	229-264
X -- Y	JONES, JEANNE. DATA READERS STREAMLINE MANAGEMENT ... ETC, The Houston Post, 26 JUNE 1994, the whole document.	285-308,311-320,345-360 ----- 309,310,361,362
☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.		
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A	document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
B	earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
L	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*g* document member of the same patent family
O	document referring to an oral disclosure, use, exhibition or other means	
P	document published prior to the international filing date but later than the priority date claimed	
Date of the actual completion of the international search 27 APRIL 1999		Date of mailing of the international search report 12 MAY 1999
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230		Authorized officer CHRAYR A. SAYADIAN <i>Jerry Hill</i> Telephone No. (703) 306-4169

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BNSDOCID: <WO_____8843148A3_I_>

Activision Blizzard, Inc. - Ex. 1002

Page 433

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US98/05787

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,902,880 A (GARCZYNSKI et al.) 20 FEBRUARY 1990, the whole document, teaching the use of authentication codes to authenticate the winning lotto ticket.	4,12,14,21,23,31,45
A	US 5,371,796 A (AVARNE) 06 DECEMBER 1994, the whole document, teaching the use of encrypted authentication codes to protect against altering of the authentication code.	4,12,14,21,23,31,45

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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : H04K 1/02		A2	(11) International Publication Number: WO 99/11008
			(43) International Publication Date: 4 March 1999 (04.03.99)
(21) International Application Number: PCT/US98/17382		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).	
(22) International Filing Date: 21 August 1998 (21.08.98)			
(30) Priority Data:			
08/920,116	26 August 1997 (26.08.97)	US	
09/045,036	20 March 1998 (20.03.98)	US	
09/107,971	30 June 1998 (30.06.98)	US	
(71) Applicant: WALKER ASSET MANAGEMENT LIMITED PARTNERSHIP [US/US]; Four High Ridge Park, Stamford, CT 09605-1324 (US).			
(72) Inventor: VAN LUCHENE, Andrew, S.; 13-2a Clarmore Drive, Norwalk, CT 06850 (US).			
(74) Agents: ALDERUCCI, Dean et al.; Walker Digital Corporation, Intellectual Property Dept., Five High Ridge Park, Stamford, CT 06905-1326 (US).			

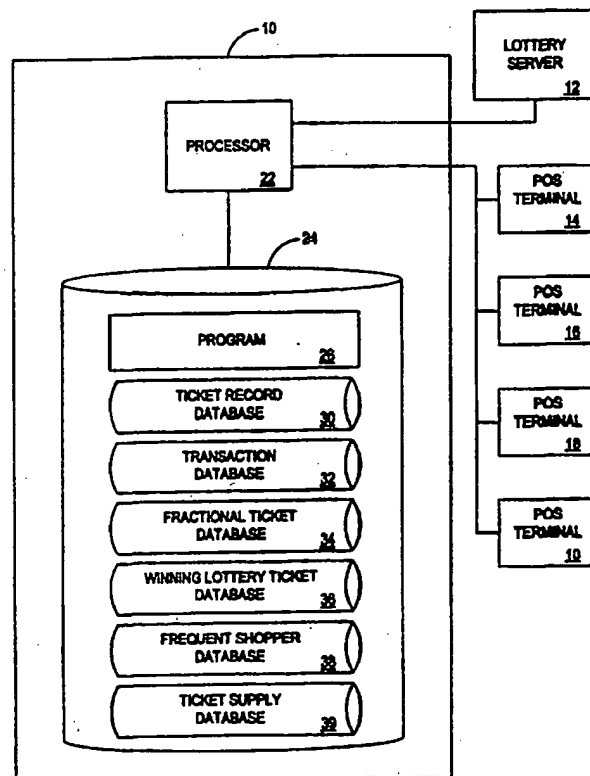
Published

Without international search report and to be republished upon receipt of that report.

(54) Title: METHOD AND APPARATUS FOR FACILITATING THE PLAY OF FRACTIONAL LOTTERY TICKETS UTILIZING POINT-OF-SALE TERMINALS

(57) Abstract

In accordance with the present invention, a store controller determines a monetary value, such as an amount of spare change due to a customer. The store controller also selects a ticket record that includes a set of ticket numbers. Subsequently, the store controller purchases at least one lottery ticket based on the monetary value and the set of ticket numbers. The store controller then outputs the information to a POS terminal, which prints a fractional lottery ticket redeemable for a portion of the lottery ticket's prize. The fractional lottery ticket includes the ticket numbers and a fractional lottery ticket value that is based on the monetary value. The fractional lottery ticket value may be, for example, equal to the monetary value, or may be the monetary value rounded to the nearest nickel. After a drawing date for the lottery ticket, the customer redeems the fractional lottery ticket, typically at a POS terminal, if a prize is due. The POS terminal communicates with the store controller, which receives the ticket numbers and the fractional lottery ticket value therefrom. From the received information, the store controller may determine a prize value of the corresponding lottery ticket. The customer is, in turn, provided with a portion of the prize value based on the fractional lottery ticket value.



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METHOD AND APPARATUS FOR FACILITATING
THE PLAY OF FRACTIONAL LOTTERY TICKETS
UTILIZING POINT-OF-SALE TERMINALS

5

CROSS-REFERENCE TO RELATED APPLICATIONS

The present application is a continuation-in-part application of co-pending Patent Application No. 09/045,036, entitled METHOD AND

10 APPARATUS FOR FACILITATING THE PLAY OF FRACTIONAL LOTTERY TICKETS UTILIZING POINT-OF-SALE TERMINALS, filed on March 20, 1998, and a continuation-in-part application of co-pending Patent Application No. 08/920,116, entitled METHOD AND SYSTEM FOR PROCESSING SUPPLEMENTARY PRODUCT SALES AT A POINT-OF-

15 SALE TERMINAL, filed on August 26, 1997, which is a continuation-in-part of co-pending Patent Application No. 08/822,709, entitled SYSTEM AND METHOD FOR PERFORMING LOTTERY TICKET TRANSACTIONS UTILIZING POINT-OF-SALE TERMINALS, filed on March 21, 1997, each of which are incorporated herein by reference.

20

CROSS REFERENCE TO CO-PENDING APPLICATIONS

The present invention is related to the following United States Patent Applications:

U.S. Patent Application Ser. No. 09/045,084, entitled METHOD

25 AND APPARATUS FOR CONTROLLING OFFERS THAT ARE PROVIDED AT A POINT OF SALE TERMINAL, filed on March 20, 1998; U.S. Patent

Application Ser. No. 09/045,518, entitled METHOD AND APPARATUS FOR PROCESSING A SUPPLEMENTARY PRODUCT AT A POINT OF SALE TERMINAL, filed March 20, 1998; U.S. Patent Application Ser. No. 09/045,386, entitled METHOD AND APPARATUS FOR CONTROLLING THE
5 PERFORMANCE OF A SUPPLEMENTARY PROCESS AT A POINT OF SALE TERMINAL, filed March 20, 1998; U.S. Patent Application Ser. No. 09/045,347, entitled METHOD AND APPARATUS FOR PROCESSING A SUPPLEMENTARY PRODUCT SALE AT A POINT OF SALE TERMINAL, filed March 20, 1998; and U.S. Patent Application Ser. No. 09/083,689, entitled
10 METHOD AND SYSTEM FOR SELLING SUPPLEMENTAL PRODUCTS AT A POINT OF SALE TERMINAL, filed May 21, 1998, each assigned to the assignee of the present invention and incorporated by reference herein.

FIELD OF THE INVENTION

15 The present invention relates to point-of-sale terminals, and more specifically to point-of-sale terminals that facilitate the purchase of lottery tickets.

BACKGROUND OF THE INVENTION

Lotteries are extremely popular games that generate significant
20 revenues for sponsoring states that offer them. In a typical lottery, a player (ticket holder) purchases a lottery ticket having ticket numbers and a serial number inscribed thereon. The ticket numbers allow both the ticket holder and a lottery agent to identify whether the ticket holder has won a prize. The serial number uniquely identifies the lottery ticket, and is typically recorded by a lottery

agency so that the lottery ticket may be validated. For example, the serial number may be used to verify whether the ticket numbers inscribed on a ticket match those ticket numbers that the lottery agency has recorded as associated with that lottery ticket.

5 A typical lottery ticket has six ticket numbers, each selected from a range, such as the range from one to forty-nine. The six ticket numbers may have been selected by the ticket holder or, at the request of the ticket holder, randomly selected by the lottery terminal printing the ticket. On a drawing date, the lottery agency randomly selects six ticket numbers, which are deemed
10 "winning" ticket numbers. A lottery ticket having ticket numbers that match some or all of the winning ticket numbers is a winning ticket, and the corresponding holder of the lottery ticket wins a prize.

 The grandparent application of the present application, Patent Application No. 08/822,709, entitled SYSTEM AND METHOD FOR
15 PERFORMING LOTTERY TICKET TRANSACTIONS UTILIZING POINT-OF-SALE TERMINALS, filed on March 21, 1997, discloses a system and method by which fractional lottery tickets may be sold to a customer at a point-of-sale ("POS") terminal in exchange for change due. For example, a customer may bring a purchase to a POS terminal, and the POS terminal may calculate the
20 purchase price to be \$4.74. If the purchase price is rounded to the nearest \$1, the change due is $\$5.00 - \$4.74 = \$0.26$. Accordingly, the customer may be sold a 26% share of a \$1 lottery ticket in lieu of the change due. If the lottery ticket wins, 26% of the corresponding prize is awarded to the customer.

There are numerous advantages to providing a fractional lottery ticket in exchange for change due. As described in the parent application of the present application, Patent Application No. 08/920,116, entitled METHOD AND SYSTEM FOR PROCESSING SUPPLEMENTARY PRODUCT SALES AT A POINT-OF-SALE TERMINAL, filed on August 26, 1997, dispensing and collecting coins is costly and burdensome. Furthermore, many customers consider coins to be dirty, and would prefer not to handle them. Thus, many customers will find the exchange of change due for a fractional lottery ticket to be very desirable.

Unfortunately, some state lottery agencies may be reluctant to change their practices by issuing lottery tickets for fractional amounts. Such state lottery agencies may instead prefer to offer tickets in only a few predetermined, rounded amounts, such as tickets for \$1, \$2 and \$5 only. In some circumstances, the ability to offer fractional lottery tickets may require substantial modifications to the hardware and software of lottery terminals used throughout one or more states. Although such changes may ultimately be profitable, the initial cost may be perceived to be unduly burdensome, and the eventual profit to be made may appear too speculative. In summary, the issuance of fractional lottery tickets by state lottery agencies may not be practical in all circumstances.

Accordingly, it would be advantageous to facilitate the purchase of fractional lottery tickets without requiring significant changes in existing lottery systems.

SUMMARY OF THE INVENTION

It is an object of the present invention to facilitate the purchase of fractional lottery tickets without requiring significant changes to existing lottery systems.

5 In accordance with the present invention, a store controller determines a monetary value, such as an amount of spare change due to a customer. The store controller also selects a ticket record that includes a set of ticket numbers. Subsequently, the store controller purchases at least one lottery ticket based on the monetary value and the set of ticket numbers. The store
10 controller then outputs the information to a POS terminal, which prints a fractional lottery ticket redeemable for a portion of the lottery ticket's prize. The fractional lottery ticket includes the ticket numbers and a fractional lottery ticket value that is based on the monetary value. The fractional lottery ticket value may be, for example, equal to the monetary value, or may be the monetary value
15 rounded to the nearest nickel.

After a drawing date for the lottery ticket, the customer redeems the fractional lottery ticket, typically at a POS terminal, if a prize is due. The POS terminal communicates with the store controller, which receives the ticket numbers and the fractional lottery ticket value therefrom. From the received
20 information, the store controller may determine a prize value of the corresponding lottery ticket. The customer is, in turn, provided with a portion of the prize value based on the fractional lottery ticket value.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a schematic illustration of a network of POS terminals provided in accordance with the present invention.

FIG. 2 is a schematic illustration of a store controller of the
5 network of FIG. 1.

FIG. 3 is a schematic illustration of a POS terminal of the network of FIG. 1.

FIG. 4 is a schematic illustration of an alternate embodiment of a POS terminal of the network of FIG. 1.

10 FIG. 5 is a schematic illustration of a ticket record database of the store controller of FIG. 2.

FIG. 6 is a schematic illustration including exemplary data for the ticket record database of FIG. 5.

15 FIG. 7 is a schematic illustration of a transaction database of the store controller of FIG. 2.

FIG. 8 is a schematic illustration of records of a fractional ticket database of the store controller of FIG. 2.

FIG. 9 is a schematic illustration including further exemplary data for the ticket record database of FIG. 5.

20 FIG. 10 is a flow chart illustrating a method for creating fractional lottery tickets.

FIG. 11 is a schematic illustration of a ticket supply database of the store controller of FIG. 2.

FIG. 12 is a schematic illustration of a winning lottery ticket database of the store controller of FIG. 2.

FIG. 13 is a schematic illustration of a frequent shopper database of the store controller of FIG. 2.

5 FIG. 14 is a flow chart illustrating a method for redeeming a fractional lottery ticket.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

In accordance with the present invention, a business may issue a
10 fractional lottery ticket to a customer, and subsequently acquire at least one lottery ticket having the same ticket numbers as the fractional lottery ticket. The fractional lottery ticket has a "value" that defines a portion of the lottery ticket. A share of any prize that is won with the lottery ticket is provided to the customer, the share of the prize being based on the portion. The value of the fractional
15 lottery ticket may be expressed as a monetary value, such \$0.34, and/or as a percentage, such as 17%. For example, if a customer receives a fractional lottery ticket having a value of \$0.34 and defining a portion of a \$2.00 lottery ticket, then the customer receives 17% ($\$0.34 / \$2.00 = 17\%$) of any prize won with that lottery ticket.

20 Typically, the business will provide fractional lottery tickets to customers and then acquire a group of corresponding lottery tickets before the drawing date. The prizes won by the group of lottery tickets are received by the business, which in turn pays shares of the prizes to customers based on the portions defined by the values of the fractional lottery tickets. Since the business

need only purchase conventional lottery tickets, the business may facilitate the play of fractional lottery tickets without requiring significant changes in existing lottery agency practices.

A portion defined by a fractional lottery ticket may be based on a
5 change amount that is due in connection with a transaction at a POS terminal. Such an embodiment is advantageous since many customers will welcome an alternative to receiving change. Moreover, receiving something having a high perceived value, such as a fractional lottery ticket, instead of change can be even more attractive to customers.

10 Referring to FIG. 1, a network 8 comprises a store controller 10, which is in communication with a lottery server 12 and with POS terminals 14, 16, 18 and 20. The POS terminals 14, 16, 18 and 20, which are typically cash registers, may initiate and/or complete fractional lottery ticket transactions. Although four POS terminals are shown in FIG. 1, any number of POS terminals
15 may be in communication with the store controller 10. The POS terminals 14, 16, 18 and 20 may be located in the same store, in different stores of a chain of stores, or in other locations.

The store controller 10 directs the operation of, stores data from and transmits data to the POS terminals 14, 16, 18 and 20. The store controller
20 10 may itself be a POS terminal or may be another computing device that can communicate with one or more POS terminals. The lottery server 12 is typically controlled by a state lottery agency, and responds to requests from the store controller 10. For example, the lottery server 12 may issue lottery tickets as

requested by the store controller 10, and may provide the winning numbers for a drawing date.

Referring to FIG. 2, the store controller 10 of FIG. 1 comprises a processor 22, such as one or more conventional microprocessors. The processor
5 22 is in communication with a data storage device 24, such as an appropriate combination of magnetic, optical and/or semiconductor memory. The processor 22 and the storage device 24 may each be (i) located entirely within a single computer or other computing device; (ii) in communication with each other by a remote communication link, such as a serial port cable, telephone line or radio
10 frequency transceiver; or (iii) a combination thereof. For example, the store controller 10 may comprise one or more computers that are in communication with a remote server computer for maintaining databases.

The storage device 24 stores a program 26 for controlling the processor 22. The processor 22 performs instructions of the program 26, and
15 thereby operates in accordance with the present invention, and particularly in accordance with the methods described in detail herein. The program 26 furthermore includes program elements that may be necessary, such as an operating system and "device drivers" for allowing the processor 22 to interface with computer peripheral devices. Appropriate device drivers and other
20 necessary program elements are known to those skilled in the art, and thus need not be described in detail herein.

The storage device 24 also stores (i) ticket record database 30; (ii) a transaction database 32; (iii) a fractional ticket database 34; (iv) a winning lottery ticket database 36; (v) a frequent shopper database 38; and (vi) a ticket

supply database 39. The databases 30, 32, 34, 36, 38 and 39 are described in detail below and depicted with exemplary entries in the accompanying figures. As will be understood by those skilled in the art, the schematic illustrations of and accompanying descriptions of the databases presented herein are exemplary arrangements for stored representations of information. A number of other arrangements may be employed besides the tables shown. Similarly, the illustrated entries represent exemplary information, but those skilled in the art will understand that the number and content of the entries can be different from those illustrated herein.

10 Referring to FIG. 3, a schematic illustration of a POS terminal 40 is descriptive of the POS terminals 14, 16, 18 and 20 of FIG. 1. The POS terminal 40 comprises a processor 42, such as one or more conventional microprocessors. The processor 42 is in communication with a data storage device 44, such as an appropriate combination of magnetic, optical and/or
15 semiconductor memory. The processor 42 and the storage device 44 may each be (i) located entirely within a single computer or other computing device; (ii) in communication with each other by a remote communication link, such as a serial port cable, telephone line or radio frequency transceiver; or (iii) a combination thereof. For example, the POS terminal 40 may comprise one or more computers
20 which are in communication with a remote server computer for maintaining databases.

An input device 46, a printer 48 and a display device 50 are each in communication with the processor 42. The input device 46 preferably comprises a keypad for transmitting input signals, such as signals indicative of a

purchase, to the processor 42. The input device 46 may also comprise an optical bar code scanner for reading bar codes and transmitting signals indicative of those bar codes to the processor 42. The printer 48 is for registering indicia on paper or other material, thereby printing fractional lottery tickets as commanded
5 by the processor 42. The display device 50 is preferably a video monitor for displaying at least alphanumeric characters to the customer and/or a cashier operating the POS terminal 40. Many types of input devices, printers and display devices are known to those skilled in the art, and need not be described in detail herein.

10 The storage device 44 stores a POS terminal program 52 for controlling the processor 42. The processor 42 performs instructions of the POS terminal program 52, and thereby operates in accordance with the present invention, and particularly in accordance with the methods described in detail herein. The POS terminal program 52 furthermore includes program elements
15 that may be necessary, such as an operating system and "device drivers" for allowing the processor 42 to interface with computer peripheral devices, such as the input device 46, the printer 48 and the display device 50. Appropriate device drivers and other necessary program elements are known to those skilled in the art, and thus need not be described in detail herein.

20 FIG. 4 illustrates an alternate embodiment of a POS terminal 58, which is descriptive of the POS terminals 14, 16, 18 and 20 of FIG. 1. A control device 60 is in communication via a communication medium 62 with a system 64 for printing fractional lottery tickets, receipts and/or coupons. The control device 60 comprises a processor 66 that is in communication with the input device 46

(FIG. 3) and the display device 50 (FIG. 3). The system 64 for printing comprises a processor 68 in communication with the storage device 44 (FIG. 3) and the printer 48 (FIG. 3). In this embodiment, the control device 60 may be a cash register, and the system 64 may be an electronic device for printing tickets
5 in accordance with data received from the cash register. Other configurations of the POS terminal 40 will be understood by those skilled in the art.

The description that follows is arranged into the following sections: Creating Fractional Lottery Tickets, Acquiring Lottery Tickets, and Redeeming Portions of Lottery Tickets.

10

Creating Fractional Lottery Tickets

Referring to FIG. 5, the ticket record database 30 of FIG. 2 includes rows 80, 82, 84, 86 and 88, each of which represents an entry of the
15 ticket record database 30. Each entry defines a set of ticket numbers that are included on one or more fractional lottery tickets. Thus, each entry defines one or more lottery tickets to be purchased. In particular, each entry includes (i) a ticket record identifier 90 that uniquely identifies the entry; (ii) a drawing date 92 that indicates when winning ticket numbers will be announced; (iii) ticket
20 numbers 94; (iv) a total value amount 96, which is the sum of all values of the fractional lottery tickets which have the corresponding ticket numbers; and (v) an amount to round up 98, which is a minimal amount that, when added to the total value amount 96, yields a sum that is a whole-number multiple of the corresponding lottery ticket price.

The total value amount indicates for each entry how many lottery tickets having the same set of the corresponding ticket numbers should be purchased. In one embodiment, the number of lottery tickets to purchase is determined by the price of a lottery ticket. In particular, the total number of

5 lottery tickets purchased for an entry may be the lowest integer number of tickets such that the total price of the purchased tickets is greater than the corresponding total value amount. For example, if the total value amount is \$7.84 and the price of a lottery ticket is \$1.00, then eight lottery tickets cost \$8.00, which is greater than \$7.84, yet seven lottery tickets cost \$7.00, which is less than \$7.84.

10 Accordingly, the lowest number of lottery tickets that yields a total price greater than \$7.84 is eight lottery tickets, so eight lottery tickets should be purchased. In another example, if the total value amount is \$5.51 and the price of a lottery ticket is \$2.00, then three lottery tickets cost \$6.00, which is greater than \$5.51, yet two lottery tickets cost \$4.00, which is less than \$5.51. Accordingly, the

15 lowest number of lottery tickets that yields a total price greater than \$5.51 is three lottery tickets, so three lottery tickets should be purchased.

Referring to FIG. 6, exemplary data for the ticket record database 30 (FIGS. 2 and 5) are shown before and after a fractional lottery ticket has been issued. The table 110 represents the ticket record database 30 before a

20 transaction represented by a round-up amount 130. The table 120 represents the ticket record database 30 after the transaction represented by the round-up amount 130. The round-up amount 130 has a value of \$0.35, and corresponds to a transaction where a customer exchanges his change due (\$0.35) for a fractional lottery ticket. The fractional lottery ticket defines a portion of a lottery ticket, and

the portion is based on the monetary amount \$0.35. Reference numeral 132 indicates a set of ticket numbers, and may be chosen by the customer or generated by a POS terminal.

As described above, each of the entries shown in the table 110 corresponds to a set of ticket numbers. The set of ticket numbers indicated by reference numeral 132 is the ticket numbers "01, 20, 30, 16, 28, 13". The entry 135 of the table 110 also represents the ticket numbers "01, 20, 30, 16, 28, 13". Accordingly, the entry 135 is selected, and the corresponding total value amount is increased by \$0.35. An entry 140 of the table 120 represents the ticket numbers "01, 20, 30, 16, 28, 13" after the total value amount is increased by \$0.35 (from \$0.78 to \$1.13).

Referring to FIG. 7, the transaction database 32 of FIG. 2 includes rows 150, 152, 154, 156 and 158, each of which represents an entry of the transaction database 32. Each entry defines a transaction initiated by a POS terminal. In particular, each entry includes (i) a transaction number 160 that uniquely identifies the transaction; (ii) a POS terminal identifier 162 that uniquely identifies the POS terminal initiating the transaction; (iii) a purchase price 164; (iv) a rounding multiple 165 that is used to indicate an amount to which the purchase price is to be rounded; (v) a round-up amount 166 that is the monetary amount used to purchase the fractional lottery ticket; (vi) an indication of whether the offer for a fractional lottery ticket was accepted 168; (vii) a frequent shopper number 170 identifying a customer who has used a frequent shopper card for the transaction; (viii) a date 172 of the transaction; and (ix) a

fractional lottery ticket identifier 174 that identifies a fractional lottery ticket provided in exchange for the round-up amount.

The round-up amount 166 is the monetary amount used to purchase the fractional lottery ticket. In some embodiments, the value of a fractional lottery ticket is equal to the round-up amount 166. For example, a customer may have \$0.62 in change (the round-up amount) from a purchase, and use that change to acquire a fractional lottery ticket that defines a \$0.62 portion of a lottery ticket. However, the value of the fractional lottery ticket need not be equal to the monetary amount used to purchase the fractional lottery ticket. In certain embodiments, the value of a fractional lottery ticket is based on a rounded-down (or rounded-up) monetary amount. For example, a customer may have \$0.62 in change from a purchase, and use that change to acquire a fractional lottery ticket. The fractional lottery ticket may have a value of \$0.60 (\$0.62 rounded down to the nearest nickel). Of course, the monetary amount may be rounded down to other multiples, such as to the nearest dime, quarter or dollar, and that rounded amount would define the value, and thus a portion of a lottery ticket. The difference between the change due and the rounded-down amount upon which the fractional lottery ticket is based may be kept as a service fee by the seller of the fractional lottery ticket.

The value of a fractional lottery ticket may be based on the monetary amount in still further ways. For example, the value may be double the monetary amount. It may be advantageous to provide such a value if a customer buys a predetermined good or type of good, or if the customer uses a frequent shopper card. For example, if a customer has \$0.62 in change and purchases a

product of a particular manufacturer, the customer may receive a fractional lottery ticket having a value of \$1.24 (double \$0.62) in exchange for his change.

Referring to FIG. 8, tables 180 and 190 represent records of the fractional ticket database 34 (FIG. 2). Typically, the fractional ticket database 34 includes a plurality of records such as those represented by the table 180 and 190. Each record of the fractional ticket database 34 defines a fractional lottery ticket.

The record represented by the table 180 defines a fractional lottery ticket that is identified by an identifier 185 (the identifier "1001"). The table 180 includes an entry 187, which defines a portion of a lottery ticket that is included in the fractional lottery ticket "1001". The entry 187 includes (i) a ticket identifier 182 that uniquely identifies the lottery ticket; and (ii) a portion 184 indicating a portion of the lottery ticket that is included in the fractional lottery ticket "1001".

Similarly, the record represented by the table 190 defines a fractional lottery ticket that is identified by an identifier 195 (the identifier "1003"). The table 190 includes entries 197 and 198, which each include (i) a ticket identifier 192; and (ii) a portion 194. Since the fractional lottery ticket "1003" includes portions from more than one lottery ticket, the fractional lottery ticket "1003" may include portions which collectively exceed the maximum price of one lottery ticket. Accordingly, the value of the fractional lottery ticket "1003" may exceed the maximum price of one lottery ticket.

As described above, a fractional lottery ticket has a "value" that defines a portion of a lottery ticket, or portions of more than one lottery ticket. In certain embodiments, the ticket numbers of the fractional lottery ticket are not

chosen by the customer, but are instead chosen automatically by the POS terminal or store controller 10 (FIG. 1). In such embodiments, ticket numbers are selected from the sets of ticket numbers of the ticket record database 30 (FIG. 2). The ticket numbers may be selected in several ways. For example, an entry of

5 the ticket record database 30 may be selected at random, and thus the ticket numbers of the fractional lottery ticket are selected randomly.

Alternatively, an entry may be selected based on the value of the fractional lottery ticket and the respective amounts to round up of the entries. In one embodiment, an entry having an amount to round up at least as great as the

10 value may be selected. Similarly, a set of entries that each have an amount to round up at least as great as the value may be determined. From this set, the entry that has a minimal amount to round up is selected. The description below further clarifies this method of selecting an entry from the ticket record database 30.

15 Referring to FIG. 9, a table 200 illustrates exemplary data for the ticket record database 30 (FIGS. 2 and 5). The table 200 includes entries 202, 204, 206 and 208. A round-up amount 220 of \$0.60 corresponds to a transaction where a customer exchanges his change due (\$0.60) for a fractional lottery ticket. The fractional lottery ticket has a value of \$0.60. To select an entry of the ticket

20 record database 30 to define the ticket numbers of the fractional lottery ticket, the store controller 10 determines a set of entries that each have an amount to round up of at least \$0.60. This set includes the entries 204, 206 and 208. From this set, the lottery ticket which has a minimal amount to round up is selected. Of the entries 204, 206 and 208, the entry 208 has the minimal amount to round up

(\$0.61). Accordingly, the entry 208 is selected, the corresponding total value amount is increased by \$0.60 (i.e. from \$3.39 to \$3.99), and the corresponding amount to round up is adjusted (i.e. to \$0.01) to reflect the increased total value amount.

5 In other embodiments, the customer may select the ticket numbers himself at the time of the transaction, either manually or through ticket numbers stored on a card, such as a smart card or a frequent shopper card having a magnetic strip. Such an embodiment allows a customer to obtain a fractional lottery ticket having his favorite or "lucky" numbers. The ticket record database
10 30 is searched to determine if an entry already indicates the customer-selected ticket numbers. If so, then the total value amount is increased in accordance with the value of the fractional lottery ticket, and the amount to round up is adjusted to reflect the increased total value amount, as described above. If no entry indicates the customer-selected ticket numbers, a new entry is created in the ticket record
15 database 30. The new entry includes (i) a unique ticket record identifier, (ii) an appropriate drawing date, (iii) the customer-selected ticket numbers, (iv) a total value amount equal to the value of the fractional lottery tickets, and (v) an appropriate amount to round up.

 Once a fractional lottery ticket has been determined, the POS
20 terminal prints for the customer a ticket indicative of the fractional lottery ticket, for example, on a receipt. The printed ticket serves as proof that the customer is entitled to the indicated portions of any prizes for the indicated ticket numbers. Such a printed ticket may include the corresponding (i) fractional lottery ticket identifier, (ii) ticket numbers, (iii) portion(s) of lottery ticket(s) included in the

fractional lottery ticket, (iv) transaction identifier, and (v) an encrypted code based on any combination thereof. Such an encrypted code may be used to verify that the printed ticket is unaltered. Encryption techniques are described in "Applied Cryptography: Protocols, Algorithms and Source Code in C, Second Edition", by Bruce Schneier, published 1996. Those skilled in the art will understand that the encrypted code will be determined by a cryptographic algorithm such that it would be almost impossible for a forger to generate a valid code, much less a code that indicates winning ticket numbers.

The printed ticket may also include contractual language, such as provisions assigning to the customer the right and title in and to the indicated portions of any prizes for the indicated ticket numbers. Still further matter such as the drawing date and an expiration date of the fractional lottery ticket may be included on the printed ticket, as will be understood by those skilled in the art. It may be further desirable to print a bar code that indicates any or all of the above information, thereby facilitating entry of the information using a bar code scanner.

FIG. 10 illustrates a method 240 for creating fractional lottery tickets. In one embodiment, the method 240 is performed if a customer accepts an offer to exchange his spare change for a fractional lottery ticket. At step 242, a value for the fractional lottery ticket is determined. For example, a POS terminal may calculate an amount of change due and round this amount down to the nearest dime. The POS terminal transmits the rounded amount to the store controller, and the store controller thereby determines the value to be this rounded amount. The store controller in turn selects an entry (step 244) of the

ticket record database 30, the entry indicating the ticket numbers for the fractional lottery ticket. As described above, the entry may be selected randomly, such as when the customer allows randomly-selected ticket numbers to be used on his fractional lottery ticket. Alternatively, the entry may be selected based on the value, as described above. If the fractional lottery ticket is to include customer-selected ticket numbers that are not represented in the ticket record database 30, then a new entry is created and selected.

The selected entry is adjusted based on the value (step 246). For example, the corresponding total value amount is increased by the value, and the corresponding amount to round up is adjusted to reflect the increased total value amount. At step 248, the fractional ticket database 34 (FIG. 2) is likewise adjusted to create a new record defining the fractional lottery ticket. The store controller then outputs ticket numbers and the value of the fractional lottery ticket (step 250). The store controller typically transmits the ticket numbers and the value to the POS terminal, and the POS terminal in turn prints a fractional lottery ticket based on thereon. The POS terminal may print on the fractional lottery ticket the ticket numbers and the value, as well as any other desirable information, such as a drawing date.

20

Acquiring Lottery Tickets

As described above, each entry of the ticket record database 30 (FIG. 2) defines one or more lottery tickets to be purchased. The store controller 10 (FIG. 1) sends signals to the lottery server 12 (FIG. 1) to purchase lottery

tickets. In particular, enough lottery tickets are purchased before the drawing date to assure that each fractional lottery ticket corresponds to portions of the lottery tickets.

Tickets may be purchased at predefined periods, such as at the end of each business day and/or as requested by an operator of the store controller 10. It may further be desirable to purchase all required lottery tickets at a predefined time before the drawing, such as twelve hours before the drawing. In such an embodiment, additional fractional lottery tickets for that drawing may not be issued after such a predetermined time. However, customers would still be able to purchase fractional lottery tickets for later drawings.

In another embodiment, lottery tickets for each entry in the ticket record database 30 (FIG. 2) may be purchased when the amount to round up of the entry is below a predetermined value. For example, each time the amount to round up of an entry is below \$0.02, and the number of already-purchased lottery tickets (if any) corresponding to that entry is insufficient with respect to the total value amount, one or more additional lottery tickets are purchased.

Referring to FIG. 11, the ticket supply database 39 (FIG. 2) includes entries 251, 252, 253 and 254, each of which defines a number of lottery tickets having the same set of ticket numbers. Each entry includes (i) ticket numbers 255 (ii) a ticket price 256, and (iii) a number of lottery tickets 257 that have been purchased. As illustrated by FIG. 9, each entry of the ticket supply database 39 corresponds to an entry of the ticket record database 30. Further, the number of tickets for each entry of the ticket supply database 39 defines a number of purchased lottery tickets that is sufficient with respect to the total value

amount of the corresponding entry of the ticket record database 30. For example, the entry 254 defines four purchased lottery tickets, each at a price of \$1.00.

Thus, there are enough tickets with the ticket numbers "10, 19, 24, 29, 36, 39" for a total value amount of up to \$4.00 ($4 * \$1.00 = \4.00). Since the corresponding

5 entry 208 indicates a total value amount of \$3.39, the four tickets are sufficient.

Redeeming Portions of Lottery Tickets

The business or other entity acquiring and maintaining the supply
10 of lottery tickets may check each to determine whether any are winning tickets. If so, the business preferably redeems the winning tickets for prizes as soon as practical, so that the prizes may be used to pay those customers that have corresponding fractional lottery tickets. Winning ticket numbers may be entered manually into the store controller 10 (FIG. 1) when available. Ideally, the store
15 controller 10 will receive from the lottery server 12 (FIG. 1) the winning ticket numbers for each drawing date. The store controller can store these winning ticket numbers in the winning lottery ticket database 36 (FIG. 2).

Referring to FIG. 12, the winning lottery ticket database 36 includes entries 260, 262 and 264, each defining winning ticket numbers for a
20 drawing date. Each entry includes (i) a corresponding drawing date 266, (ii) winning ticket numbers 268, and (iii) a prize 270. The winning lottery ticket database 36 should include entries for all drawing dates corresponding to valid and redeemable fractional lottery tickets. For example, if fractional lottery tickets may be redeemed up to one year after the corresponding drawing date, then the

entries for each drawing date of at least the past year should be stored. The prize
270 may be, for example, the prize won upon matching all winning ticket
numbers. More prizes may be specified for each entry. For example, a prize for
matching only five of six winning ticket numbers may be specified for each entry
5 as well.

When winning ticket numbers for a drawing date are received by
the store controller 10 (FIG. 1), the store controller 10 may simply store them in
the winning lottery ticket database 36, where they are accessed when fractional
lottery tickets are redeemed by customers. However, the store controller 10 may
10 also determine which fractional lottery tickets include portions of a winning
lottery ticket. Then the corresponding records of the fractional ticket database 34
(FIG. 2) may be modified to indicate that the fractional lottery tickets include
portions of winning lottery tickets. In addition, if those fractional lottery tickets
were purchased using frequent shopper cards, then the corresponding customer
15 may be notified.

Referring to FIG. 13, the frequent shopper database 38 includes
entries 280, 282, 284 and 286, each defining a frequent shopper (a customer who
has used a frequent shopper card for the transaction). In particular, each entry
includes (i) a frequent shopper number 288 for uniquely identifying the frequent
20 shopper; (ii) an address 290 of the frequent shopper; (iii) a telephone number 292
of the frequent shopper; (iv) a name 294 of the frequent shopper; and (v) an email
address 296 of the frequent shopper. With such stored information, frequent
shoppers may be notified by mail, telephone call, email or other forms of
notification as desired. In addition, frequent shoppers may be notified by the

POS terminal when they next use their frequent shopper card. Providing frequent shopper with the additional benefit of notification is advantageous because it may prompt customers to become frequent shoppers. Consequently, these customers are more likely to continue frequenting the corresponding business.

5 As further incentive to become a frequent shopper, it may be desirable to only provide frequent shoppers with the opportunity to purchase fractional lottery tickets. For example, an offer for a fractional lottery ticket may be provided only during transactions in which a frequent shopper card is used.

 To redeem a fractional lottery ticket, a customer preferably
10 provides the printed ticket to show that he is entitled to the indicated share of the prize. The printed ticket is verified to assure that it is valid and unaltered. For example, if the printed ticket is valid, the fractional lottery ticket identifier inscribed on the printed ticket indicates a record in the fractional ticket database 34 (FIG. 2). That record should in turn indicate corresponding information on the
15 printed ticket. In addition, the encrypted code can be verified.

 Referring to FIG. 14, a method 300 for redeeming a fractional lottery ticket initiates by receiving (i) a ticket numbers, and (ii) a portion identifier that identifies an allocated portion of the lottery ticket (step 302). Such identifiers may be received by manually entering one or more identifiers into a
20 POS terminal, from which the identifiers are transmitted to the store controller 10 (FIG. 1). Alternatively, a bar code scanner of the POS terminal may read a bar code on the printed ticket, and transmit the bar code to the store controller 10. The entered identifier or bar code may be indicative of the fractional lottery ticket identifier, which may be used to retrieve a corresponding ticket identifier and

portion identifier from the fractional ticket database 34 (FIG. 2). The store controller thus receives the ticket identifier and portion identifier.

Once the identifiers are received, thereby identifying one or more lottery tickets and allocated portions thereof, a prize value of the lottery tickets is
5 determined (step 304). As discussed above, the prize value may be determined by comparing ticket numbers of a lottery ticket with winning ticket numbers stored in the winning lottery ticket database 36 (FIG. 2). As also described above, the portion of the prize that is to be provided to the customer is determined by the allocated portion of the lottery ticket. This portion of the prize is provided
10 to the customer (step 306), typically by providing cash from a cash register or by writing or printing a check made out to the customer.

A winning lottery ticket that has been purchased may have an unallocated portion greater than zero. Such a winning lottery ticket will have an associated portion of the prize value that is not to be paid to customers. This
15 portion of the prize is instead retained by the business, and may be used to finance various customer incentives. For example, a portion of retained prize value may be provided back to customers in the form of fractional lottery tickets (e.g., \$0.05 of change buys a \$0.50 fractional lottery ticket).

The business may retain further winnings by providing winning
20 tickets with portions of certain prize values. For example, customers may only be provided with shares of "jackpot" prizes (e.g. matching all six winning ticket numbers). Any other prizes are retained by the business. Of course, such restrictions would typically be explained to the customers through advertising and printed information on the fractional lottery ticket.

Although the present invention has been described with respect to a preferred embodiment thereof, those skilled in the art will note that various substitutions may be made to those embodiments described herein without departing from the spirit and scope of the present invention. For example, the
5 present invention is applicable to many types of games besides lotteries in which prizes are awarded. In addition, in some embodiments the data stored on the store controller may instead be stored among the POS terminals. Similarly, some of the functions performed by the store controller may be performed by the POS terminal, and vice versa.

What is claimed is:

1. A method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:
 - determining a monetary value;
 - 5 selecting a ticket record that includes a set of ticket numbers;
 - purchasing at least one lottery ticket based on the monetary value and the set of ticket numbers after the step of selecting; and
 - outputting the ticket numbers and a fractional lottery ticket value that is based on the monetary value.
- 10 2. The method of claim 1, in which the step of determining a monetary value comprises:
 - determining a monetary value based on an amount of change due for a purchase.
3. The method of claim 1, in which the step of selecting comprises:
 - 15 creating the ticket record.
4. The method of claim 1, in which the step of selecting comprises:
 - selecting a ticket record randomly.
5. The method of claim 1, further comprising:
 - receiving a signal indicating selected ticket numbers.

6. The method of claim 5, in which the step of selecting comprises:
searching a plurality of ticket records to select a ticket record that
indicates the selected ticket numbers.
7. The method of claim 1, further comprising:
5 increasing a total value amount of the selected ticket record in accordance
with the fractional lottery ticket value.
8. The method of claim 7, further comprising:
adjusting an amount to round up based on the increased total value
amount.
- 10 9. The method of claim 1, in which the step of selecting comprises:
selecting a ticket record having an amount to round up at least as great as
the fractional lottery ticket value.
10. The method of claim 1, in which the step of selecting comprises:
determining a set of ticket records that each have an amount to round up
15 at least as great as the fractional lottery ticket value; and
selecting a ticket record from the set of ticket records which has a
minimal amount to round up.
11. A method for facilitating the purchase of fractional lottery tickets using a
point-of-sale terminal, comprising:

determining an amount of change due for a purchase;
determining a monetary value based on the amount of change due;
selecting a ticket record that includes a set of ticket numbers;
purchasing at least one lottery ticket based on the value and the set of
5 ticket numbers after the step of selecting; and
outputting the ticket numbers and a fractional lottery ticket value that is
based on the monetary value.

12. The method of claim 11, in which the step of determining a monetary
value comprises:

10 rounding the amount of change due to a predetermined multiple, thereby
generating a rounded change amount; and
setting the monetary value equal to the rounded change amount.

13. The method of claim 12, in which the step of rounding the amount of
change due comprises:

15 rounding down the amount of change due to a predetermined multiple,
thereby generating a rounded-down change amount.

14. The method of claim 11, further comprising:
outputting an offer to exchange a fractional lottery ticket for change due.

15. A method for facilitating the purchase of fractional lottery tickets using a
20 point-of-sale terminal, comprising:

- determining a monetary value;
- selecting a ticket record that includes a set of ticket numbers;
- purchasing at least one lottery ticket based on the value and the set of ticket numbers after the step of selecting; and
- 5 outputting the ticket numbers and a fractional lottery ticket value that is based on the monetary value;
- determining a prize value of the at least one lottery ticket; and
- providing a portion of the prize value based on the fractional lottery ticket value.

- 10 16. A method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:
 - determining a total value amount corresponding to a set of ticket numbers;
 - and
 - acquiring at least one lottery ticket having the set of ticket numbers based
 - 15 on the total value amount.

17. The method of claim 16, in which the step of acquiring is performed at predefined periods.

18. The method of claim 16, in which the step of acquiring is performed at a predefined time before a drawing.

- 20 19. The method of claim 16, further comprising:

determining an amount to round up based on the total value amount;
and in which the step of acquiring is performed when the amount to round up is
below a predetermined value.

20. An apparatus for facilitating the purchase of fractional lottery tickets
5 using a point-of-sale terminal, comprising:
a storage device; and
a processor connected to the storage device,
the storage device storing a program for controlling the processor; and
the processor operative with the program to:
10 determine a monetary value;
select a ticket record that includes a set of ticket numbers;
purchase at least one lottery ticket based on the monetary value
and the set of ticket numbers after the step of selecting; and
output the ticket numbers and a fractional lottery ticket value that
15 is based on the monetary value.

21. A computer readable medium encoded with processing instructions for
implementing a method for facilitating the purchase of fractional lottery tickets
using a point-of-sale terminal, the method comprising:
determining a monetary value;
20 selecting a ticket record that includes a set of ticket numbers;
purchasing at least one lottery ticket based on the monetary value and the
set of ticket numbers after the step of selecting; and

outputting the ticket numbers and a fractional lottery ticket value that is based on the monetary value.

22. An apparatus for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

- 5 a storage device; and
- a processor connected to the storage device,
- the storage device storing a program for controlling the processor; and
- the processor operative with the program to:
 - determine an amount of change due for a purchase;
 - 10 determine a monetary value based on the amount of change due;
 - select a ticket record that includes a set of ticket numbers;
 - purchase at least one lottery ticket based on the value and the set
 - of ticket numbers after the step of selecting; and
 - output the ticket numbers and a fractional lottery ticket value that
 - 15 is based on the monetary value.

23. A computer readable medium encoded with processing instructions for implementing a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, the method comprising:

- determining an amount of change due for a purchase;
- 20 determining a monetary value based on the amount of change due;
- selecting a ticket record that includes a set of ticket numbers;

purchasing at least one lottery ticket based on the value and the set of ticket numbers after the step of selecting; and
outputting the ticket numbers and a fractional lottery ticket value that is based on the monetary value.

- 5 24. An apparatus for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:
- a storage device; and
 - a processor connected to the storage device,
 - the storage device storing a program for controlling the processor; and
 - 10 the processor operative with the program to:
 - determine a monetary value;
 - select a ticket record that includes a set of ticket numbers;
 - purchase at least one lottery ticket based on the value and the set of ticket numbers after the step of selecting; and
 - 15 output the ticket numbers and a fractional lottery ticket value that is based on the monetary value;
 - determine a prize value of the at least one lottery ticket; and
 - provide a portion of the prize value based on the fractional lottery ticket value.

- 20 25. A computer readable medium encoded with processing instructions for implementing a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, the method comprising:

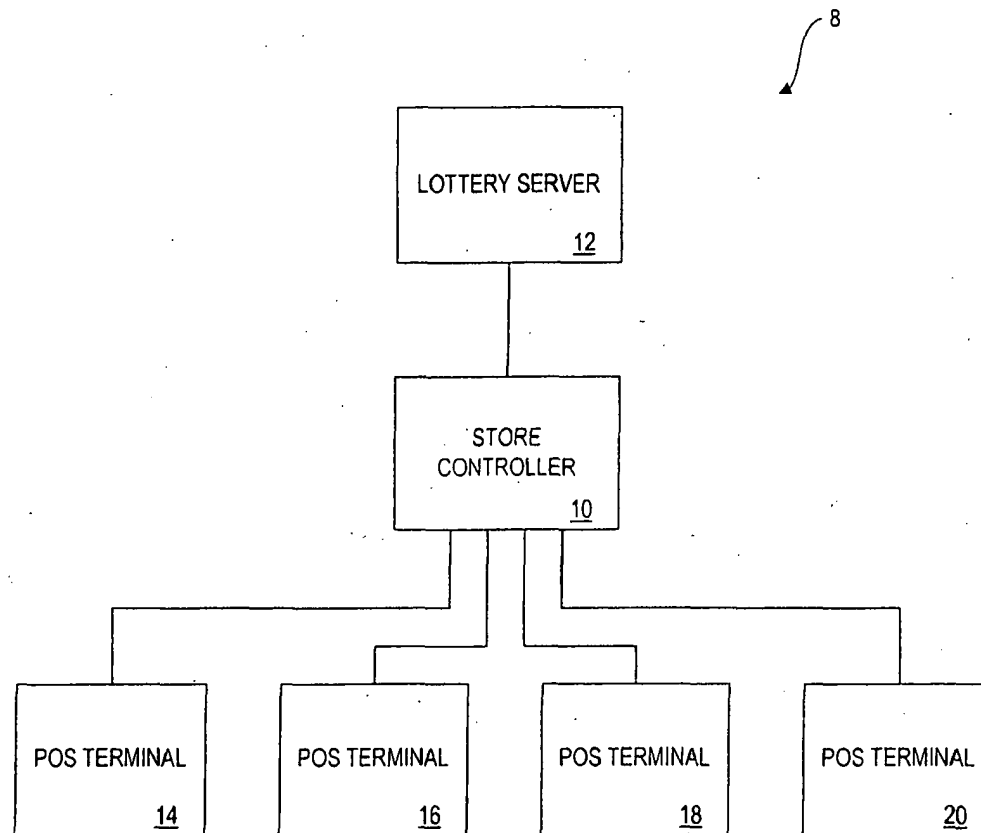
determining a monetary value;
selecting a ticket record that includes a set of ticket numbers;
purchasing at least one lottery ticket based on the value and the set of
ticket numbers after the step of selecting; and
5 outputting the ticket numbers and a fractional lottery ticket value that is
based on the monetary value;
determining a prize value of the at least one lottery ticket; and
providing a portion of the prize value based on the fractional lottery ticket
value.

- 10 26. An apparatus for facilitating the purchase of fractional lottery tickets
using a point-of-sale terminal, comprising:
a storage device; and
a processor connected to the storage device,
the storage device storing a program for controlling the processor; and
15 the processor operative with the program to:
determine a total value amount corresponding to a set of ticket
numbers; and
acquire at least one lottery ticket having the set of ticket numbers
based on the total value amount.

- 20 27. A computer readable medium encoded with processing instructions for
implementing a method for facilitating the purchase of fractional lottery tickets
using a point-of-sale terminal, comprising:

determining a total value amount corresponding to a set of ticket numbers;
and
acquiring at least one lottery ticket having the set of ticket numbers based
on the total value amount.

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FIG. 1

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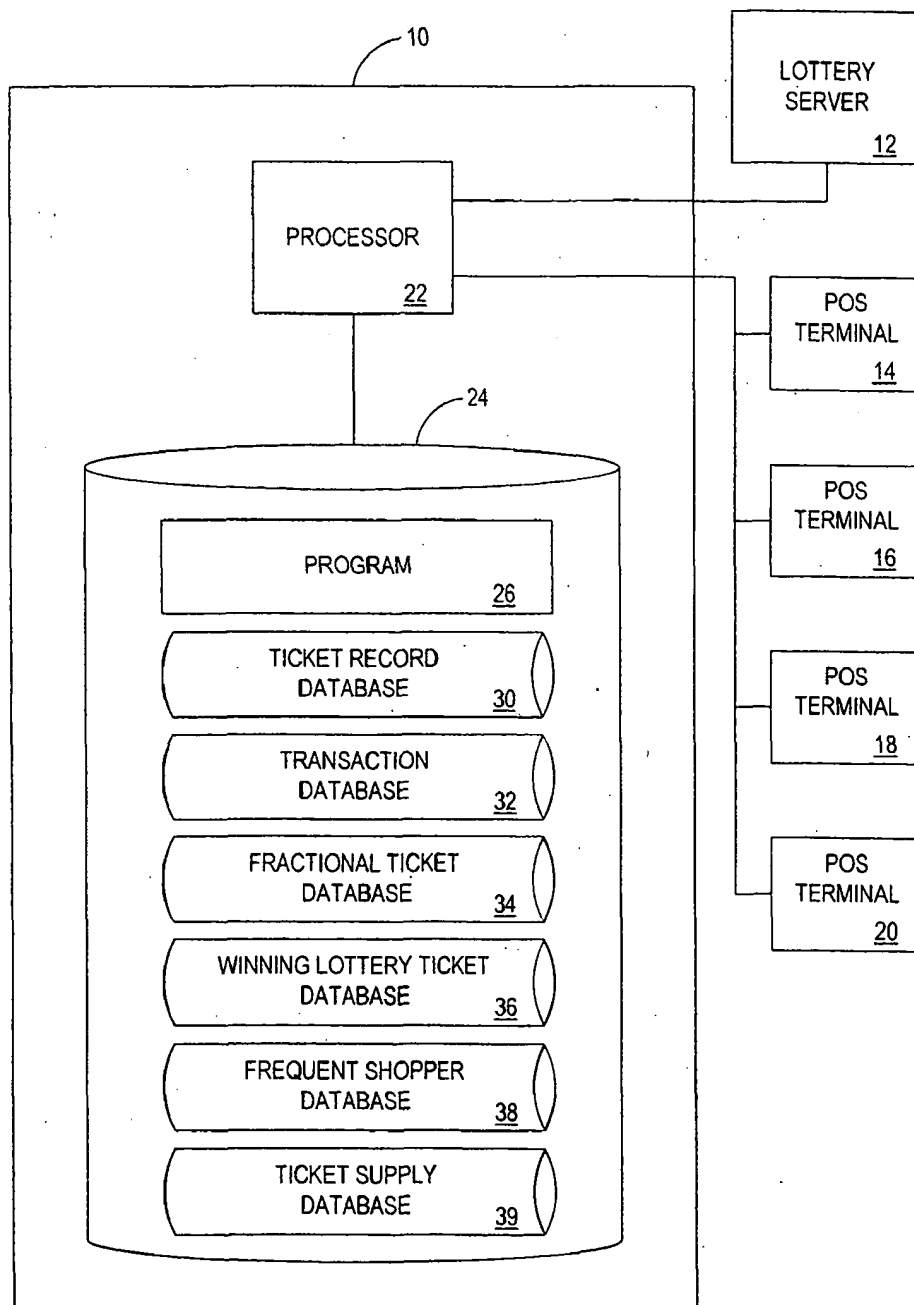


FIG. 2

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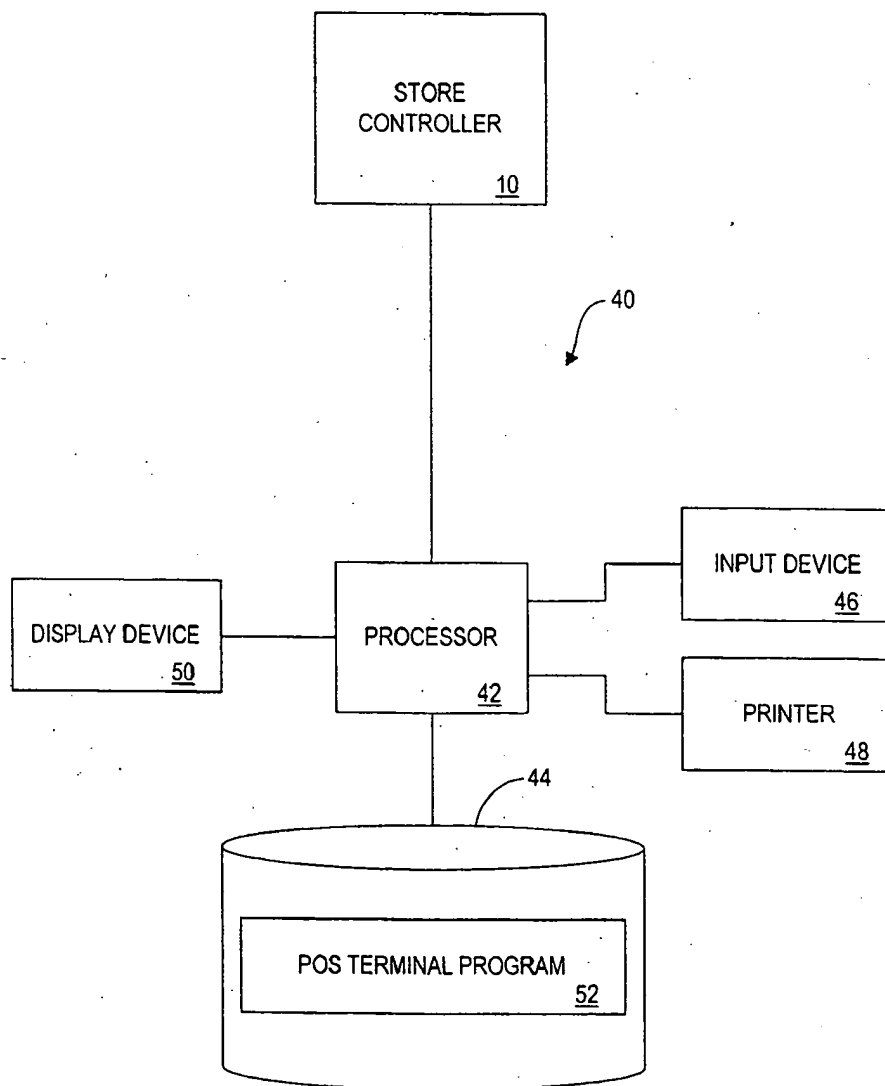


FIG. 3

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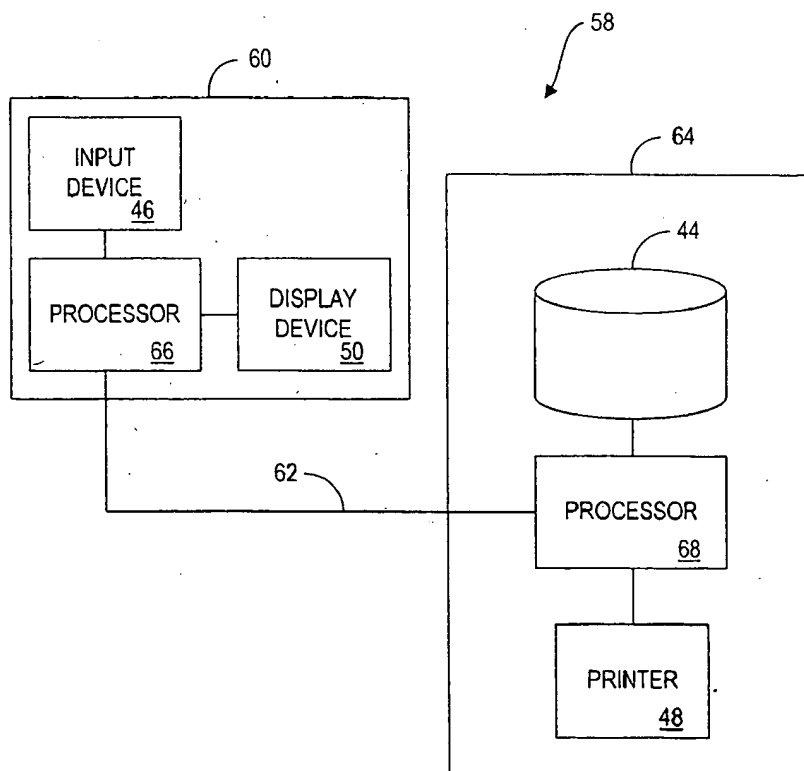


FIG. 4

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TICKET RECORD IDENTIFIER ⁹⁰	DRAWING DATE ⁹²	TICKET NUMBERS ⁹⁴	TOTAL VALUE AMOUNT ⁹⁶	AMOUNT TO ROUND UP ⁹⁸
1234560	2/10/98	11,12,13,04,21,34	\$0.12	\$0.88
1234561	2/10/98	01,21,04,25,13,11	\$0.31	\$0.69
1234562	2/10/98	11,25,35,04,06,03	\$0.12	\$0.77
1234563	2/10/98	01,20,30,16,28,13	\$0.78	\$0.22
1234564	2/10/98	02,30,21,26,24,01	\$7.10	\$0.90

FIG. 5

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TICKET RECORD IDENTIFIER	DRAWING DATE	TICKET NUMBERS	TOTAL VALUE AMOUNT	AMOUNT TO ROUND UP
1234560	2/10/98	11,12,13,04, 21,34	\$0.12	\$0.88
1234561	2/10/98	01,21,04,25, 13,11	\$0.31	\$0.88
1234562	2/10/98	11,25,35,04, 06,03	\$0.23	\$0.77
1234563	2/10/98	01,20,30,16, 28,13	\$0.22	\$0.87
1234564	2/10/98	02,30,21,26, 24,01	\$7.10	\$0.80

SELECTED TICKET NUMBERS	01,20,30,16,28,13
----------------------------	-------------------

ROUND UP AMOUNT	\$0.35
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TICKET RECORD IDENTIFIER	DRAWING DATE	TICKET NUMBERS	TOTAL VALUE AMOUNT	AMOUNT TO ROUND UP
1234560	2/10/98	11,12,13,04, 21,34	\$0.12	\$0.88
1234561	2/10/98	01,21,04,25, 13,11	\$0.31	\$0.69
1234562	2/10/98	11,25,35,04, 06,03	\$0.23	\$0.77
1234563	2/10/98	01,20,30,16, 28,13	\$1.13	\$0.77
1234564	2/10/98	02,30,21,26, 24,01	\$7.10	\$0.90

FIG. 6

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TRANSACTION NUMBER	POS TERMINAL IDENTIFIER	PURCHASE PRICE	ROUNDING MULTIPLE	ROUND UP AMOUNT	ACCEPTED OFFER FOR TICKET	FREQUENT SHOPPER NUMBER	DATE	FRACTIONAL LOTTERY TICKET IDENTIFIER
150 7614234	1	\$16.88	\$1	\$0.12	YES	111111	2/10/98	1001
152 7614235	1	\$12.31	\$1	\$0.69	YES	111112	2/10/98	1002
154 7614236	2	\$13.23	\$5	\$1.77	YES	111113	2/10/98	1003
156 7614237	2	\$25.78	\$1	\$0.22	YES	111114	2/10/98	1004
158 7614238	2	\$31.10	\$10	\$8.90	NO	111115	2/10/98	N/A

FIG. 7

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180

FRACTIONAL LOTTERY TICKET 1001	
TICKET IDENTIFIER <u>182</u>	PORTION <u>184</u>
987654321	\$0.12

185

187

190

FRACTIONAL LOTTERY TICKET 1003	
TICKET IDENTIFIER <u>192</u>	PORTION <u>194</u>
987654360	\$1.00
987654400	\$0.77

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FIG. 8

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	TICKET RECORD IDENTIFIER	DRAWING DATE	TICKET NUMBERS	TOTAL VALUE AMOUNT	AMOUNT TO ROUND UP
202	1234000	2/17/98	12,21,28, 35,38,40	\$0.55	\$0.45
204	1234001	2/17/98	5,15,25, 35,40,41	\$0.27	\$0.73
206	1234002	2/17/98	2,8,14, 26,39,42	\$1.16	\$0.84
208	123003	2/17/98	10,19,24, 29,36,39	\$3.39	\$0.84

220
↓

ROUND UP AMOUNT	\$0.60
-----------------	--------

FIG. 9

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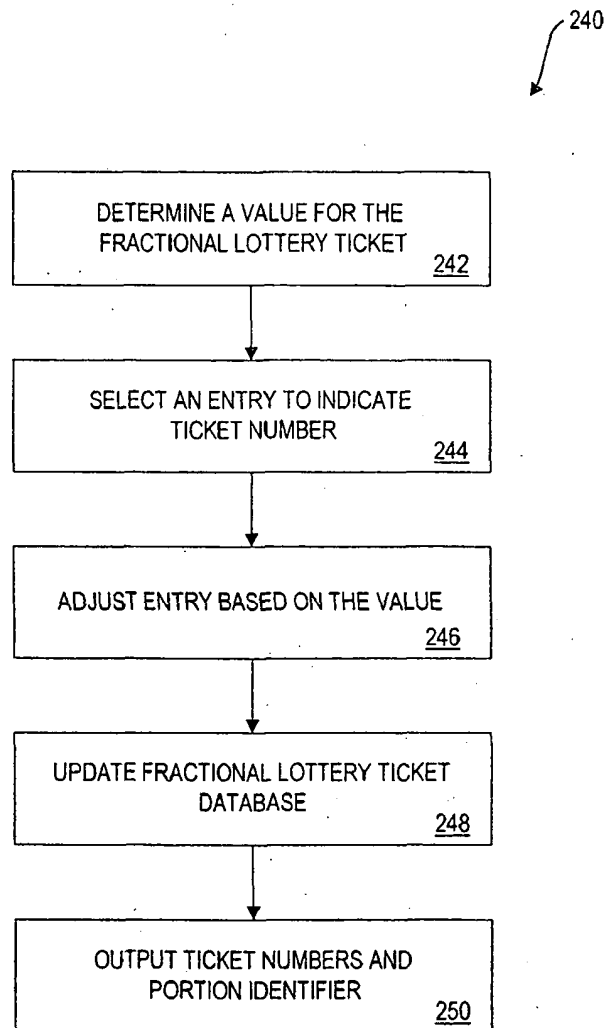


FIG. 10

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	TICKET NUMBERS	TICKET PRICE	NUMBER OF TICKETS
251	12,21,28,35,38,40	\$1.00	1
252	5,15,25,35,40,41	\$1.00	1
253	2,8,14,26,39,42	\$1.00	1
254	10,19,24,29,36,39	\$1.00	1

200

	TICKET RECORD IDENTIFIER	DRAWING DATE	TICKET NUMBERS	TOTAL VALUE AMOUNT	AMOUNT TO ROUND UP
202	1234000	2/17/98	12,21,28,35,38,40	\$0.55	\$0.45
204	1234001	2/17/98	5,15,25,35,40,41	\$0.27	\$0.45
206	1234002	2/17/98	2,8,14,26,39,42	\$1.16	\$0.84
208	123003	2/17/98	10,19,24,29,36,39	\$3.39	\$0.84

FIG. 11

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DRAWING DATE 266	WINNING TICKET NUMBERS 268	PRIZE 270
1/7/98	02,03,12,16,21,25	\$1,000,000
1/14/98	03,04,16,21,22,24	\$2,000,000
1/21/98	01,02,03,04,11,06	\$1,500,000

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FIG. 12

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FREQUENT SHOPPER NUMBER 288	ADDRESS 290	TELEPHONE 292	NAME 294	E-MAIL ADDRESS 296
11111	12 MAIN ST. ANYTOWN, USA	(111) 456-7890	SUSAN GREEN	-
11112	456 RIVER DR. ANYTOWN, USA	(222) 234-9876	JONATHAN STEVENS	JSTEVENS@BMI.COM
11113	5412 MADISON AVE. ANYTOWN, USA	(333) 246-8108	NANCY EVANS	-
11113	99 PARK LA. ANYTOWN, USA	(444) 359-6129	RALPH STEWART	-

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FIG. 13

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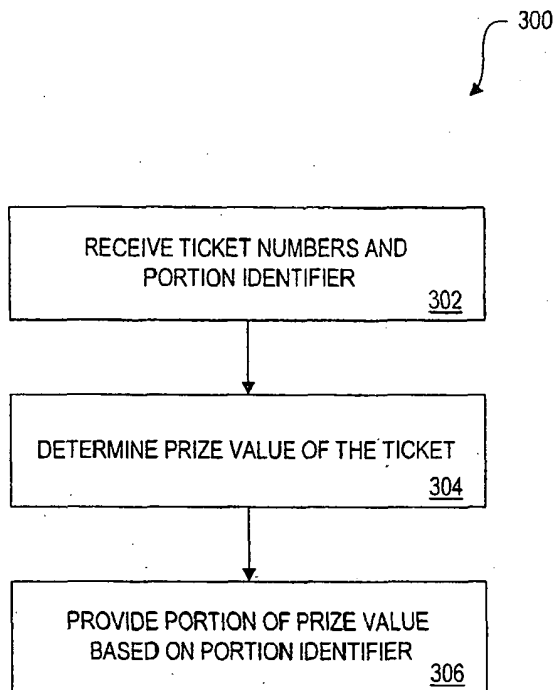


FIG. 14



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification ⁶ : A36F 3/06</p>	A3	<p>(11) International Publication Number: WO 99/11008</p> <p>(43) International Publication Date: 4 March 1999 (04.03.99)</p>											
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;"> <p>(21) International Application Number: PCT/US98/17382</p> <p>(22) International Filing Date: 21 August 1998 (21.08.98)</p> <p>(30) Priority Data:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">08/920,116</td> <td style="width: 30%;">26 August 1997 (26.08.97)</td> <td style="width: 40%;">US</td> </tr> <tr> <td>09/045,036</td> <td>20 March 1998 (20.03.98)</td> <td>US</td> </tr> <tr> <td>09/107,971</td> <td>30 June 1998 (30.06.98)</td> <td>US</td> </tr> </table> <p>(71) Applicant: WALKER ASSET MANAGEMENT LIMITED PARTNERSHIP [US/US]; Four High Ridge Park, Stamford, CT 09605-1324 (US).</p> <p>(72) Inventor: VAN LUCHENE, Andrew, S.; 13-2a Clarmore Drive, Norwalk, CT 06850 (US).</p> <p>(74) Agents: ALDERUCCI, Dean et al.; Walker Digital Corporation, Intellectual Property Dept., Five High Ridge Park, Stamford, CT 06905-1326 (US).</p> </td> <td style="width: 50%; vertical-align: top; padding: 5px;"> <p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <p>(88) Date of publication of the international search report: 8 July 1999 (08.07.99)</p> </td> </tr> </table>			<p>(21) International Application Number: PCT/US98/17382</p> <p>(22) International Filing Date: 21 August 1998 (21.08.98)</p> <p>(30) Priority Data:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">08/920,116</td> <td style="width: 30%;">26 August 1997 (26.08.97)</td> <td style="width: 40%;">US</td> </tr> <tr> <td>09/045,036</td> <td>20 March 1998 (20.03.98)</td> <td>US</td> </tr> <tr> <td>09/107,971</td> <td>30 June 1998 (30.06.98)</td> <td>US</td> </tr> </table> <p>(71) Applicant: WALKER ASSET MANAGEMENT LIMITED PARTNERSHIP [US/US]; Four High Ridge Park, Stamford, CT 09605-1324 (US).</p> <p>(72) Inventor: VAN LUCHENE, Andrew, S.; 13-2a Clarmore Drive, Norwalk, CT 06850 (US).</p> <p>(74) Agents: ALDERUCCI, Dean et al.; Walker Digital Corporation, Intellectual Property Dept., Five High Ridge Park, Stamford, CT 06905-1326 (US).</p>	08/920,116	26 August 1997 (26.08.97)	US	09/045,036	20 March 1998 (20.03.98)	US	09/107,971	30 June 1998 (30.06.98)	US	<p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <p>(88) Date of publication of the international search report: 8 July 1999 (08.07.99)</p>
<p>(21) International Application Number: PCT/US98/17382</p> <p>(22) International Filing Date: 21 August 1998 (21.08.98)</p> <p>(30) Priority Data:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">08/920,116</td> <td style="width: 30%;">26 August 1997 (26.08.97)</td> <td style="width: 40%;">US</td> </tr> <tr> <td>09/045,036</td> <td>20 March 1998 (20.03.98)</td> <td>US</td> </tr> <tr> <td>09/107,971</td> <td>30 June 1998 (30.06.98)</td> <td>US</td> </tr> </table> <p>(71) Applicant: WALKER ASSET MANAGEMENT LIMITED PARTNERSHIP [US/US]; Four High Ridge Park, Stamford, CT 09605-1324 (US).</p> <p>(72) Inventor: VAN LUCHENE, Andrew, S.; 13-2a Clarmore Drive, Norwalk, CT 06850 (US).</p> <p>(74) Agents: ALDERUCCI, Dean et al.; Walker Digital Corporation, Intellectual Property Dept., Five High Ridge Park, Stamford, CT 06905-1326 (US).</p>	08/920,116	26 August 1997 (26.08.97)	US	09/045,036	20 March 1998 (20.03.98)	US	09/107,971	30 June 1998 (30.06.98)	US	<p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <p>(88) Date of publication of the international search report: 8 July 1999 (08.07.99)</p>			
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09/045,036	20 March 1998 (20.03.98)	US											
09/107,971	30 June 1998 (30.06.98)	US											
<p>(54) Title: METHOD AND APPARATUS FOR FACILITATING THE PLAY OF FRACTIONAL LOTTERY TICKETS UTILIZING POINT-OF-SALE TERMINALS</p>													
<p>(57) Abstract</p> <p>In accordance with the present invention, a store controller (10) determines a monetary value, such as an amount of spare change due to a customer. The store controller also selects a ticket record (30) that includes a set of ticket numbers. Subsequently, the store controller purchases at least one lottery ticket based on the monetary value and the set of ticket numbers. The store controller then outputs the information to a POS terminal (14), which prints a fractional lottery ticket redeemable for a portion of the lottery ticket's prize. The fractional lottery ticket (34) includes the ticket numbers and a fractional lottery ticket value that is based on the monetary value. The fractional lottery ticket value may be, for example, equal to the monetary value, or may be the monetary rounded to the nearest nickel. After a drawing date for the lottery ticket, the customer redeems the fractional lottery ticket, typically at a POS terminal, if a prize is due.</p>													

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US98/17382

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : A36F 3/06

US CL : 463/16,17,18; 364/479.01

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 463/16,17,18; 364/479.01

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Extra Sheet.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,417,424 A (SNOWDEN et al) 23 May 1995, col.6, lines 62-68, col.7, lines 1-18, col.8, lines 7-13, col.9, lines 10-19.	1-27
A,P	US 5,791,990 A (SCHROEDER et al) 11 August 1998, col.6, lines 30-50, col.7, lines 66-67, col.8, lines 1-14.	1-27
A	US 5,186,463 A (MARIN et al) 16 February 1993, col.2, lines 45-53, col.3, lines 20-26, 41-43, 48-59.	1-27
A	US 5,276,312 A (McCARTHY) 04 JANUARY 1994, col.5, lines 27-49, col.6, lines 8-33, col.10, lines 10-23, col.11, lines 31-39.	1-27

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
A document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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O document referring to an oral disclosure, use, exhibition or other means	
P document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

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Form PCT/ISA/210 (second sheet)(July 1992) *

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US98/17382

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,518,239 A (JOHNSTON) 21 May 1996, col.3, lines 46-62, col.4, lines 6-15, col.5, lines 44-49.	1-27
A	US 5,613,679 A (CASA et al) 25 March 1997, col.2, lines 18-21, col.6, lines 26-40, 50-64.	1-27

Form PCT/ISA/210 (continuation of second sheet)(July 1992) *

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US98/17382

B. FIELDS SEARCHED

Electronic data bases consulted (Name of data base and where practicable terms used):

APS

search terms:kiosk,lotto,lottery,vending machine,ticket,gamble,gambling,system,game,terminat,numbers,sweepstake

Form PCT/ISA/210 (extra sheet)(July 1992) ★

WIRELESS LOTTERY GAME

Background of the Invention

5 This invention relates to a lottery game, and in particular, an instant lottery game that may be played using a wireless communications device.

 In a typical lottery game, a player purchases a lottery ticket from a point of sale terminal located at a retail establishment. The lottery ticket usually contains a set of numbers selected from a universe of numbers that is to be compared to a set of winning numbers at a time subsequent to the purchase of the lottery ticket. A player often has the option of selecting the set of numbers for the lottery ticket or allowing the point of sale terminal to produce a lottery ticket with a set of numbers chosen automatically using a quick-pick feature.

 Further, the use of wireless networks, such as cellular telephone networks, is increasing. Cellular telephone users often find it convenient to conduct as many transactions as possible using their cellular telephones.

Summary of the Invention

 In general, in one aspect, the invention features a system for playing a wagering game by a player over a wireless network. A processor is capable of issuing a gaming ticket in response to a request made by the player for placing a wager on the wagering game, the processor being capable of determining whether the gaming ticket is a winning ticket based on a predetermined criterion. A wireless communications device is used by the player for making the request to place the wager and for receiving an indication from the processor whether the gaming ticket has been determined to be a winning ticket.

 Implementations of the invention may also include one or more of the following features. The wagering game

may be an instant lottery game and the gaming ticket may be an instant lottery ticket.

The system may further include an account database connected to the processor for storing information relating to the gaming ticket and the wager. The account database may store a player gaming account associated with the player, and an amount corresponding to the wager may be deducted from the player gaming account when the player makes the request to place the wager. A monetary prize associated with a gaming ticket determined to be a winning ticket may be credited to the player gaming account.

The system may further include a ticket database from which the processor obtains the gaming ticket. The system may further include a billing system associated with use of the wireless communications device over the wireless network, the billing system storing a billing account, such that an amount corresponding to the wager is deducted from the player gaming account when the player makes the request to place the wager.

The gaming ticket may include gaming information and the predetermined criterion may be predetermined winning information, and the determination whether the gaming ticket is a winning ticket may be made by comparing the gaming information to the predetermined winning information.

The wireless communications device may be a cellular telephone. The wireless communications device may include a display, and the indication whether the gaming ticket is a winning ticket may be displayed to the player on the display. The wireless communications device may include a keypad for dialing a code to make the request to place the wager.

The system may further include a computer terminal capable of communicating with the processor over a second

network to make the request to place the wager. The computer terminal may be an on-line point of sale terminal.

In general, in another aspect, the invention features a system for playing a wagering game by a player over a wireless network. A processor is capable of issuing a gaming ticket in response to a request made by the player for placing a wager on the wagering game. The processor is also capable of determining whether the gaming ticket is a winning ticket based on a predetermined criterion. An account database is connected to the processor for storing information relating to the gaming ticket and the wager, the account database storing a player gaming account associated with the player, and an amount corresponding to the wager is deducted from the player gaming account when the player makes the request to place the wager. The processor obtains the gaming ticket from a ticket database. A wireless communications device is used by the player for making the request to place the wager and for receiving an indication from the processor whether the gaming ticket has been determined to be a winning ticket.

In general, in another aspect, the invention features a method of playing a wagering game over a wireless network using a wireless communications device. Issuance of a gaming ticket is requested to place a wager on the wagering game over the wireless network using the wireless communications device. The gaming ticket is issued, and a determination is made whether the gaming ticket is a winning ticket based on a predetermined criterion. An indication whether the gaming ticket is a winning ticket is provided over the wireless network to the wireless communications device.

Implementations of the invention may also include one or more of the following features. The method may

further include establishing an account prior to playing the wagering game. An amount corresponding to the wager may be deducted from the account when requesting issuance of the gaming ticket to place the wager. A monetary prize
5 associated with a winning ticket may be posted to the account.

The method may further include transmitting the gaming information to the wireless communications device for display on the wireless communications device. The step of
10 requesting issuance of the gaming ticket may include dialing a predetermined code on the wireless communications device.

The gaming ticket may include gaming information and the predetermined criterion may be winning information, and whether the gaming ticket is determined to be a winning
15 ticket may include comparing the gaming information to the winning information.

The present invention has the advantage that an instant lottery game or other wagering game may be played easily and conveniently from almost any location using a
20 wireless communications device such a cellular telephone.

The present invention has the further advantage that a player may purchase an instant gaming ticket and immediately obtain the game results at any time chosen by the player.

25 Other features and advantages of the invention will become apparent from the following detailed description, and from the claims.

Brief Description of the Drawings

FIG. 1 is a somewhat diagrammatic sketch of an
30 electronic lottery transaction processing system according to the present invention.

FIGS. 2A and 2B are a flow chart showing a method of playing an instant lottery game using the system of FIG. 1.

Description of the Preferred Embodiments

The lottery game of the present invention allows players to place wagers using a wireless communications device such as a cellular telephone.

5 FIG. 1 shows an electronic lottery transaction processing system 10. A player may perform instant lottery or other gaming transactions with system 10 via a wireless gaming device 20 or a computer terminal 100.

10 Wireless communications device 20 is an electronic device capable of wireless communication over a wireless network 30. Wireless communications device 20 transmits information to and communicates with a wireless service provider 40 over wireless network 30. Device 20 may be used by a subscriber to the service provided by wireless service
15 provider 40, usually by paying a fee to provider 40 for use of device 20.

 Wireless communications device 20 is preferably a cellular telephone which is capable of communication over a cellular network. A player may use a cellular telephone to
20 play an instant lottery game using system 10 by subscribing to a cellular telephone service, such as a digital telephone service.

 Wireless communications device 20 may be used to dial telephone numbers or similar codes. Device 20 may have
25 a keypad 22 similar to a standard telephone, in which letters are assigned to each of the number keys on the keypad. Keypad 22 may be used to enter information to be transmitted by wireless communications device 20 over wireless network 30.

30 Wireless communications device 20 may also have a display 24, e.g., a liquid crystal display, to display information received by device 20 over wireless network 30. Display 24 may be capable of displaying numbers, letters,

and other symbols associated with telephone calling, such as *, #, \, -, etc.

A subscriber billing system 50 may be used by wireless service provider 40. A subscriber to wireless service provider 40 may establish an account 52 in subscriber billing system 50. Money may be credited to the subscriber's account 52 when the subscriber provides payment to wireless service provider 40. Conversely, money may be debited from account 52 upon use of wireless communications device 20 by the subscriber.

Computer terminal 100 may be any type of computer processing and data transmission system. For example, terminal 100 may be a personal computer with a microprocessor 102, a memory 104, a modem 106, a display screen 108, and a keyboard 110 for entering gaming transaction information into terminal 100. Modem 106 is capable of transmitting and receiving data over a digital communications network 120 such as the Internet. Alternatively, terminal 100 may be an on-line point of sale terminal which is part of a network of such terminals.

Electronic lottery transaction system 10 includes a processor 60 for playing an instant lottery game or other wagering game and for keeping track of player gaming transactions. Processor 60 is capable of digital communication with wireless communications device 20 via wireless service provider 40 and wireless network 30, and with computer terminal 100 over digital communications network 120. Communications between wireless service provider 40 and processor 60 may be via, e.g., an external network or extranet, a direct or virtual private network, satellite communications, or radio link.

System 10 includes player account database 80. Player account database 80 establishes, maintains and stores

records of individual accounts such as player account 82. Money may be debited from player account 82 when the player places a wager using system 10. Conversely, money may be credited to account 82 when the player receives winnings for a wager he or she has made using system 10. In order for a player to perform gaming transactions using system 10, the player may be required to establish account 82 prior to using system 10 by providing an advance payment which is credited to account 82.

System 10 also includes instant ticket database 70. Instant ticket database 70 stores a plurality of sets of instant gaming numbers for instant tickets. The stored sets of gaming numbers are accessed by gaming processor 60 to obtain a set of gaming numbers for an instant ticket purchased by a player using system 10.

System 10 may also be used in conjunction with a financial institution 90. Financial institution 90 may maintain a player's bank account 92. Processor 60 may communicate with financial institution 90 to verify a player's credit or financial standing in conjunction with establishing and maintaining player account 82 in player account database 80.

FIGS. 2A and 2B are a flow chart showing a method 200 of playing an instant lottery. To play an instant lottery game using system 10, a player who subscribes to a wireless communications service may purchase an instant lottery ticket and play an instant lottery game using wireless communications device 20.

Prior to purchasing the ticket, the player provides funds to an account from which the cost of the ticket and any predetermined transaction fees will be taken upon purchase of a ticket (step 210). The player may fund either the lottery account 82 stored in the player account database

80 or the player's wireless service provider account 52 stored in subscriber billing system 50. The player may fund the player's lottery account 52, e.g., by direct payment to a gaming authority, using a pre-paid telephone card, or via
5 the Internet by an electronic commerce transaction using a computer terminal such as terminal 100 by which funds are securely transferred electronically to the player's lottery account 82 from another account such as the player's bank account 92 at financial institution 90. Alternatively, the
10 player may fund the player's wireless service provider account 52 by providing pre-payment to wireless service provider 40.

The player initiates the instant lottery transaction by dialing a predetermined telephone number or selects a
15 special dial code on a wireless communications device 20, which results in the purchase of an instant lottery ticket and the playing of the instant lottery game (step 220). For example, using a keypad 22 similar to a standard telephone keypad, the dial code #946, which corresponds to "#WIN", may
20 be used to initiate the instant lottery transaction.

Gaming processor 60 authorizes the player's purchase of an instant lottery ticket by deducting the wager amount and any transaction fees from either the player's lottery account 82 or the player's wireless service provider account
25 52, depending on which account has been funded in advance for making gaming transactions (step 230). Gaming processor 60 next selects a set of gaming numbers for the instant lottery ticket from a pool of instant lottery tickets stored in instant ticket database 70 (step 240). Gaming processor
30 60 also records the gaming transaction in player account database 80 for later verification of the player's purchase of the instant lottery ticket (step 250).

Gaming processor 60 transmits the selected set of gaming numbers for the instant ticket to wireless communications device 20 for display on display 24 (step 260). The gaming numbers may be displayed either all at once or one at a time. Display 24 allows device 20 to function essentially as a wireless video lottery terminal.

Gaming processor 60 determines whether the player's instant lottery ticket is a winning ticket based on predetermined gaming criteria, e.g., by comparing the selected set of gaming numbers to a set of winning numbers (step 270). Gaming processor 60 communicates the results of the comparison to wireless gaming device 20 over wireless network 30, indicating whether or not the player's instant lottery ticket is a winning ticket (step 280). If the player's instant ticket is a winning ticket, the player's winnings may be posted to the player's lottery account 82 or the player's wireless service provider account 52, depending on a selection made by the player prior to playing the game (step 290).

System 10 may also be used to initiate instant lottery and other gaming transactions via computer terminal 100 or a traditional on-line transaction processing system, such as a network of on-line point of sale terminals.

The present invention allows gaming transactions to be made using a system that is entirely wireless. Such a wireless system may not be subject to currently applicable limitations on wagers made over the Internet or over telephone lines. Further, an increasing number of individuals in the United States and abroad have access to wireless communications over wireless networks.

A system such as that shown in FIG. 1 may be used to play any of a large variety of games, as well as multiple-player games, e.g., an interactive racing game.

Other embodiments are within the scope of the following claims.

What is claimed is:

1 1. A system for playing a wagering game by a
2 player over a wireless network, comprising:
3 a processor capable of issuing a gaming ticket in
4 response to a request made by the player for placing a wager
5 on the wagering game, the processor being capable of
6 determining whether the gaming ticket is a winning ticket
7 based on a predetermined criterion; and
8 a wireless communications device used by the player
9 for making the request to place the wager and for receiving
10 an indication from the processor whether the gaming ticket
11 has been determined to be a winning ticket.

1 2. The system of claim 1 wherein the wagering game
2 is an instant lottery game and the gaming ticket is an
3 instant lottery ticket.

1 3. The system of claim 1 further comprising
2 an account database connected to the processor for
3 storing information relating to the gaming ticket and the
4 wager.

1 4. The system of claim 3 wherein the account
2 database stores a player gaming account associated with the
3 player, and an amount corresponding to the wager is deducted
4 from the player gaming account when the player makes the
5 request to place the wager.

1 5. The system of claim 4 wherein a monetary prize
2 associated with a gaming ticket determined to be a winning
3 ticket is credited to the player gaming account.

1 6. The system of claim 1 further comprising
2 a ticket database from which the processor obtains
3 the gaming ticket.

1 7. The system of claim 1 further comprising
2 a billing system associated with use of the wireless
3 communications device over the wireless network, the billing
4 system storing a billing account;
5 wherein an amount corresponding to the wager is
6 deducted from the player gaming account when the player
7 makes the request to place the wager.

1 8. The system of claim 1 wherein the gaming ticket
2 comprises gaming information and the predetermined criterion
3 is predetermined winning information, and the determination
4 whether the gaming ticket is a winning ticket is made by
5 comparing the gaming information to the predetermined
6 winning information.

1 9. The system of claim 1 wherein the wireless
2 communications device is a cellular telephone.

1 10. The system of claim 1 wherein the wireless
2 communications device includes a display and the indication
3 whether the gaming ticket is a winning ticket is displayed
4 to the player on the display.

1 11. The system of claim 1 wherein the wireless
2 communications device comprises a keypad for dialing a code
3 to make the request to place the wager.

1 12. The system of claim 1 further comprising a
2 computer terminal capable of communicating with the
3 processor over a second network to make the request to place
4 the wager.

1 13. The system of claim 12 wherein the computer
2 terminal is an on-line point of sale terminal.

1 14. A system for playing a wagering game by a
2 player over a wireless network, comprising:
3 a processor capable of issuing a gaming ticket in
4 response to a request made by the player for placing a wager
5 on the wagering game, the processor being capable of
6 determining whether the gaming ticket is a winning ticket
7 based on a predetermined criterion;
8 an account database connected to the processor for
9 storing information relating to the gaming ticket and the
10 wager, the account database storing a player gaming account
11 associated with the player, and an amount corresponding to
12 the wager is deducted from the player gaming account when
13 the player makes the request to place the wager;
14 a ticket database from which the processor obtains
15 the gaming ticket; and
16 a wireless communications device used by the player
17 for making the request to place the wager and for receiving
18 an indication from the processor whether the gaming ticket
19 has been determined to be a winning ticket.

1 15. A method of playing a wagering game over a
2 wireless network using a wireless communications device,
3 comprising:
4 requesting issuance of a gaming ticket to place a
5 wager on the wagering game over the wireless network using
6 the wireless communications device;
7 issuing the gaming ticket;
8 determining whether the gaming ticket is a winning
9 ticket based on a predetermined criterion; and
10 providing an indication whether the gaming ticket is
11 a winning ticket over the wireless network to the wireless
12 communications device.

1 16. The method of claim 15 further comprising
2 establishing an account prior to playing the
3 wagering game.

1 17. The method of claim 16 further comprising
2 deducting an amount corresponding to the wager from
3 the account when requesting issuance of the gaming ticket to
4 place the wager.

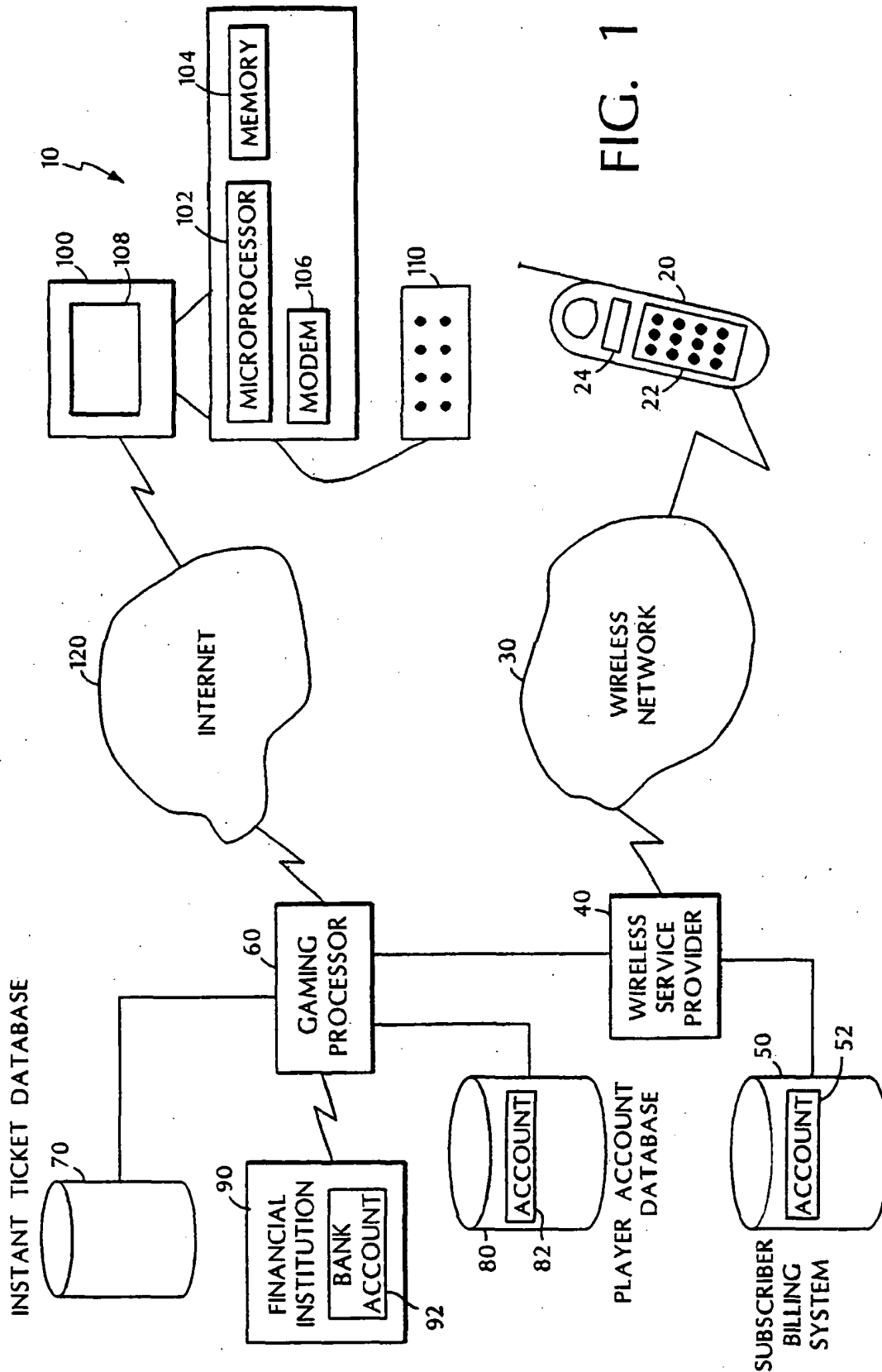
1 18. The method of claim 16 further comprising
2 posting a monetary prize associated with a winning
3 ticket to the account.

1 19. The method of claim 15 further comprising
2 transmitting the gaming information to the wireless
3 communications device for display on the wireless
4 communications device.

1 20. The method of claim 15 wherein the requesting
2 issuance of the gaming ticket comprises dialing a
3 predetermined code on the wireless communications device.

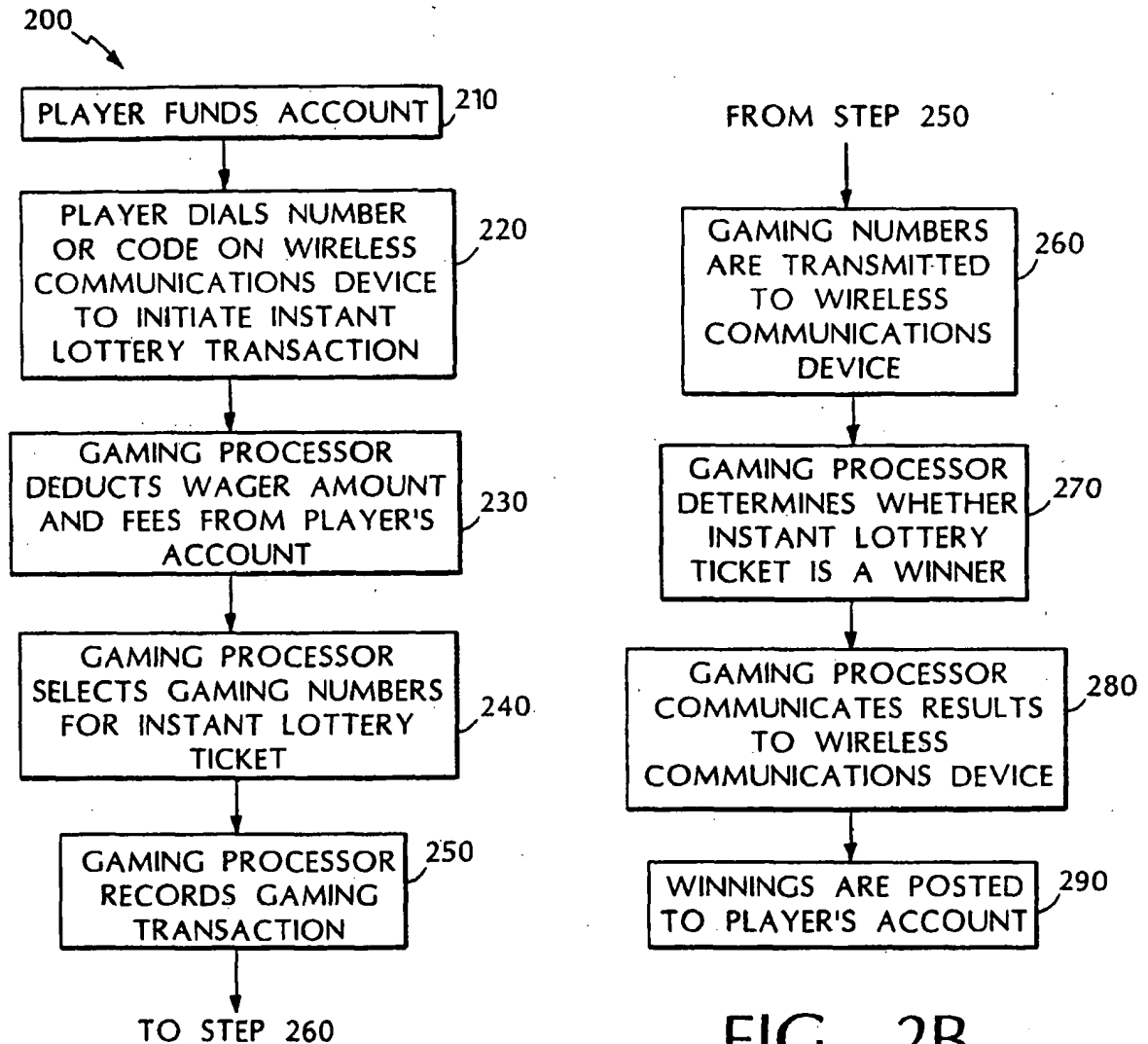
1 21. The method of claim 15 wherein the gaming
2 ticket comprises gaming information and the predetermined
3 criterion is winning information, and whether the gaming
4 ticket is determined to be a winning ticket comprises
5 comparing the gaming information to the winning information.

1/2



SUBSTITUTE SHEET (RULE 26)

2/2



SUBSTITUTE SHEET (RULE 26)

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/18671

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) :A63F 3/06

US CL :463/17, 25, 39, 42

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 463/17, 25, 39, 42; 455/412

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,816,919 A (<i>SCAGNELLI et al.</i>) 06 October 1998, column 3, lines 16-46; column 4, line 32 to column 5, line 19; column 8, lines 11-32; column 12, lines 1-11.	1-9, 11-18, 20, 21
Y, P	US 5,999,808 A (<i>LaDUE</i>) 07 December 1999, column 1, line 55 to column 2, line 8; column 10, line 40 to column 11, line 23.	10, 19

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
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"P" document published prior to the international filing date but later than the priority date claimed	

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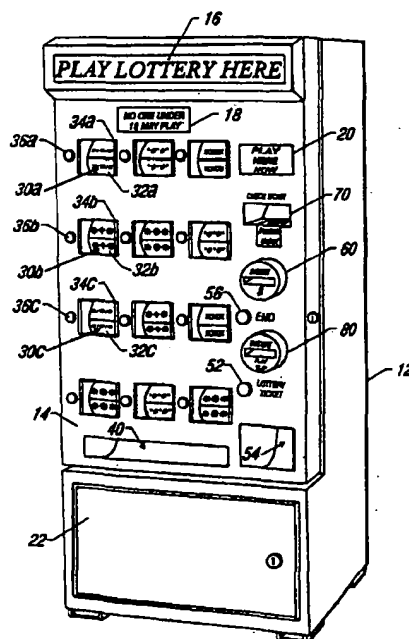
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- (71) Applicant: GTECH RHODE ISLAND CORPORATION [US/US]; 55 Technology Way, West Greenwich, RI 02817 (US).
- (72) Inventor: BREINDEL, James, R.; 6 Tamarack Trail, Coventry, RI (US).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: GAMING TICKET DISPENSING AND VERIFICATION DEVICE AND METHOD



(57) Abstract: An apparatus and method for dispensing and verifying gaming tickets includes an instant ticket dispenser (30) for dispensing an instant gaming ticket (32) to a player at a request of the player, and a printer (50) for dispensing a lottery ticket to the player at a request of the player. A ticket checking device (70) is capable of determining whether either the instant gaming ticket (32) or the lottery ticket is a winning ticket based on information on the instant gaming ticket (32) or the lottery ticket read by the ticket checking device (70). The ticket checking device (70) may also include a separate instant ticket checking device (72) and a separate lottery ticket checking device (74).

WO 01/42968 A1

GAMING TICKET DISPENSING AND VERIFICATION DEVICE AND METHODBackground of the Invention

5 The invention relates to a gaming device and method, and in particular, a multi-functional gaming ticket dispensing and verification device and method.

 Gaming tickets, including lottery tickets and instant tickets such as scratch off tickets, are frequently
10 sold at authorized gaming locations, e.g., retail establishments and casinos. A lottery ticket is typically issued to a player by the proprietor of a retail establishment or casino using an on-line point of sale terminal, which prints game numbers on the ticket at the
15 request of the player. A scratch off instant ticket is typically sold to a player by the proprietor of a retail establishment or casino, who detaches a previously manufactured instant ticket from a roll of instant tickets. Both lottery tickets and instant tickets may contain machine
20 readable information such as alphanumeric characters and bar codes that contain ticket information and that may be used to activate the process of redeeming tickets that are believed to be winning tickets.

 A player plays a lottery game by comparing winning
25 numbers, which are drawn by a gaming authority, to the game numbers printed on the player's lottery ticket to determine whether the lottery ticket is a winning ticket. A player plays an instant game by scratching off one or more areas of the scratch off instant ticket, which are covered by an
30 opaque, removable coating, to determine whether the ticket is a winning ticket based on game information on the instant ticket itself. Winning lottery tickets and instant tickets may be redeemed for prizes, including monetary prizes, at a central location of the gaming authority or at the
35 authorized gaming locations by presenting a winning ticket

to the proprietor of the retail establishment or casino to verify the winning status of the ticket and to authenticate the ticket, i.e., to ensure that the ticket has not been tampered with or altered. For a lottery ticket, the proprietor may use an on-line terminal to read machine readable information from the lottery ticket to determine the validity and authenticity of the ticket. For an instant ticket, the proprietor may use the same or a different on-line terminal to read machine readable information from the instant ticket to determine the validity and authenticity of the ticket.

Summary of the Invention

In general, in one aspect, the invention features an apparatus for dispensing and verifying gaming tickets. An instant ticket dispenser dispenses an instant gaming ticket to a player at a request of the player, and a printer dispenses a lottery ticket to the player at a request of the player. A ticket checking device is capable of determining whether either the instant gaming ticket or the lottery ticket is a winning ticket based on information on the instant gaming ticket or the lottery ticket read by the ticket checking device.

Implementations of the invention may also include one or more of the following features. The apparatus may include a random number generator for randomly determining game numbers for the lottery ticket. The apparatus may include a money acceptor for receiving money from the player to purchase the instant gaming ticket or the lottery ticket. The apparatus may also include a display for indicating to the player whether the instant gaming ticket or the lottery ticket is a winning ticket.

The apparatus may include a microprocessor for controlling operation of the instant ticket dispenser, the

printer and the ticket checking device. A central gaming processor in communication with the microprocessor may determine whether the instant gaming ticket or the lottery ticket is a winning ticket. The central gaming processor
5 may communicate with the ticket microprocessor over a digital communications network. The central gaming processor may include a database for storing ticket information relating to the instant gaming ticket and the lottery ticket.

10 The apparatus may further include a financial institution in communication with the microprocessor, the financial institution maintaining a financial account of the player by which gaming transactions are made.

 In general, in another aspect, the invention
15 features an apparatus for dispensing and verifying gaming tickets. An instant ticket dispenser dispenses an instant gaming ticket to a player at a request of the player, and a printer dispenses a lottery ticket to the player at a request of the player. An instant ticket checking device is
20 capable of determining whether the instant gaming ticket is a winning instant gaming ticket based on information on the instant gaming ticket read by the instant ticket checking device. A lottery ticket checking device is capable of determining whether the lottery ticket is a winning lottery
25 ticket based on information on the lottery ticket read by the lottery ticket checking device.

 Implementations of the invention may also include one or more of the following features. The apparatus may include a microprocessor for controlling operation of the
30 instant ticket dispenser, the printer, the instant ticket checking device and the lottery ticket checking device.

 The apparatus may include a central gaming processor in communication with the microprocessor for determining

whether the instant gaming ticket or the lottery ticket is a winning ticket. The central gaming processor may communicate with the microprocessor over a digital communications network. The central gaming processor may
5 include a database for storing ticket information relating to the instant gaming ticket and the lottery ticket.

The apparatus may include a financial institution in communication with the microprocessor, the financial institution maintaining a financial account of the player by
10 which gaming transactions are made.

In general, in another aspect, the invention features a method of dispensing and verifying gaming tickets. Either an instant gaming ticket or a lottery ticket is dispensed from a gaming device at a request of a
15 player. Information about the dispensed instant gaming ticket or lottery ticket is stored at a location remote from the gaming device. The dispensed instant gaming ticket or lottery ticket is placed into a ticket checking device connected to the gaming device, the ticket checking device
20 being capable of reading information on the dispensed instant gaming ticket or lottery ticket. Information on the dispensed instant gaming ticket or lottery ticket is compared to the information stored at the remote location. An indication whether the dispensed instant gaming ticket or
25 lottery ticket is a winning ticket is provided based on the comparison of the information on the dispensed instant gaming ticket or lottery ticket to the information stored at the remote location.

Implementations of the invention may also include
30 one or more of the following features. The presence of the dispensed instant gaming ticket or lottery ticket in the ticket checking device may be detected.

The information read from the dispensed instant gaming ticket or lottery ticket may be converted into digital data, which is transmitted to the remote location. The digital data may be formatted for secure transmission to the remote location.

The indication whether the dispensed instant gaming ticket or lottery ticket is a winning ticket may be transmitted from the remote location. The indication whether the dispensed instant gaming ticket or lottery ticket is a winning ticket may include displaying the indication to the player.

The player may be awarded a currency prize or a voucher to redeem a prize from the gaming device. The information about the dispensed instant gaming ticket or lottery ticket stored in the remote location may be sent from the gaming device to the remote location. Money from the player to dispense the instant gaming ticket or lottery ticket from the gaming device may also be accepted.

The present invention has the advantage that a single device may be used for both dispensing and verifying instant gaming tickets and lottery tickets.

The present invention has the further advantage that both the dispensing and verifying functions for instant gaming ticket and lottery tickets may be performed by a player without requiring the presence of a proprietor at an authorized gaming location.

Other features and advantages of the invention will become apparent from the following detailed description, and from the claims.

Brief Description of the Drawings

Fig. 1 is a perspective view of a multi-functional gaming ticket dispensing and verification device according to the present invention.

Fig. 2 is a diagrammatic sketch of the components and system connections of the gaming ticket dispensing and verification device of Fig. 1.

5 Figs. 3A and 3B are a flow chart showing a method of purchasing an instant gaming ticket or a lottery ticket using the gaming ticket dispensing and verification device of Fig. 1.

10 Figs. 4A and 4B are a flow chart showing a method of using the gaming ticket dispensing and verification device of Fig. 1 to verify the winning status of an instant gaming ticket or a lottery ticket of a type issued by the device.

Description of the Preferred Embodiments

The present invention relates to a device capable of both dispensing and verifying instant gaming tickets and 15 lottery tickets. The device may be used to carry out ticket purchase transactions and ticket verification transactions.

As shown in Fig. 1, multi-functional gaming device 10 includes a housing 12 with a player transaction area 14. Gaming device 10 includes a variable display 20 for 20 interacting with a player making gaming transactions using gaming device 10. Display 20 may be a liquid crystal display, a touchscreen, or an arrangement of light emitting diodes which form characters, including letters, numbers and typographical symbols. Display 20 may be used, e.g., to 25 indicate how much monetary credit is stored in gaming device 10 for purchasing tickets, whether a ticket checked by the player is a winning ticket, and instructions for redeeming a winning ticket. Gaming device 10 may also include fixed display areas 16 and 18, such as a point-of-sale display to 30 attract players to gaming device 10 or for providing warnings or other pertinent gaming information to players. Gaming device 10 may further include a secure storage area 22 for storing supplies such as paper for printing lottery

tickets and through which access may be had to the electronic components and circuitry of gaming device 10.

Gaming device 10 includes instant ticket dispensers 30a...30c disposed in player transaction area 14. Each
5 instant ticket dispenser includes a roll or packages of previously manufactured instant tickets 32a...32c, each of which may be dispensed singly to the player. Each ticket dispenser also includes a transparent window 34a...34c through which the player can see the type of instant tickets
10 in the dispenser and a ticket selection button 36a...36c which the player presses to select a ticket to be dispensed from the instant ticket dispenser. The ticket dispensers may detach the instant tickets from rolls 32a...32c and dispense the detached instant tickets or the packages of
15 instant tickets into a bin 40 through which the instant tickets are delivered to the player. Instant tickets issued from dispensers 30a...30c preferably contain machine readable information, such as alphanumeric characters and a bar code, which are used to verify and authenticate instant
20 tickets believed to be winning tickets, and which may be further used to actuate the process of redeeming a winning ticket.

Gaming device 10 includes a printer 50 (Fig. 2) which prints lottery tickets one at a time at the request of
25 the player, similar to an on-line point of sale lottery terminal. Printer 50 may also be used to print other gaming transaction receipts such as monetary vouchers to be redeemed for currency by an authorized gaming location. The player purchases a lottery ticket by pressing a lottery
30 ticket button 52 in player transaction area 14. Printer 50 prints the lottery ticket and feeds the ticket into a bin 54 through which the printed ticket is delivered to the player. The lottery tickets dispensed by gaming device 10 are

preferably quick-pick tickets, for which the game numbers are automatically randomly selected for the player.

Alternatively, the player may select the game numbers for a lottery ticket by filling out a machine readable form, e.g.,
5 a form containing areas designated with "bubbles" in which the player places pencil or pen markings, which may be inserted into, read, and processed by a play slip reader 80. The printed lottery tickets also preferably contain machine readable information, such as alphanumeric characters and a
10 bar code, which are used to verify and authenticate lottery tickets believed to be winning tickets, and which may be further used to actuate the process of redeeming a winning ticket.

Player transaction area 14 includes a money acceptor
15 60 which may be a currency bill acceptor, a coin acceptor, or a combination of both of these. Alternatively, money acceptor 60 may be a device for receiving and reading information from monetary vouchers issued by an authorized gaming location. Money acceptor 60 can accept currency or
20 vouchers, determine the value of the currency or voucher accepted, and determine whether or not the currency or voucher is authentic. Authentic currency and vouchers are stored within gaming device 10, and the value of the currency or voucher accepted is stored as a monetary credit
25 amount which may be used by the player to make ticket purchase transactions. Fraudulent currency or vouchers are ejected by gaming device 10 through either money acceptor 60 or a separate return receptacle such as bin 40.

Alternatively, money acceptor 60 may be a credit
30 card, debit card reader or a reader of smart cards or other player gaming cards. For example, the player inserts a credit card or debit card associated with a financial account 152 into the card reader (Fig. 2). The card reader

reads an account identifier associated with the account from the card and, by communicating with a financial institution 150 maintaining the account, determines whether the player has sufficient funds in the account to cover the purchase price of at least one ticket for making a ticket purchase transaction.

Gaming device 10 also includes a ticket checking device 70, which may include separate or unified instant ticket checker 72 and lottery ticket checker 74 (Fig. 2), in 10 player transaction area 14. Ticket checking device 70, i.e., instant ticket checker 72 and lottery ticket checker 74, perform the function of on-line terminals used to verify gaming tickets.

Instant ticket checker 72 is capable of reading 15 information printed on an instant ticket, including machine readable alphanumeric characters and a machine readable bar code, and converting the read information into digital data. Instant ticket checker 72 may be used by the player according to instructions provided to the player on player 20 transaction area 14 to verify that an instant ticket played by the player is a winning ticket. Instant ticket checker 72 may also be used to authenticate the instant ticket, i.e., to determine that the instant ticket has not been tampered with or altered. Instant ticket checker 72 may be 25 used to verify and authenticate instant tickets dispensed by gaming device 10 or by other similar devices or through retail distribution channels.

Lottery ticket slip checker 74 is capable of reading information printed on a lottery ticket, including machine 30 readable alphanumeric characters and a machine readable bar code, and converting the read information into digital data. Lottery ticket checker 74 may be used by the player to verify that a lottery ticket issued to the player is a

winning ticket. Lottery ticket checker 74 may also be used to authenticate the lottery ticket. Lottery ticket checker 74 may also be used to verify and authenticate lottery tickets dispensed by gaming device 10 or by other similar devices or through retail distribution channels.

Player transaction area 14 further includes an "end" button 56 which is used to indicate that the player has completed a ticket purchase transaction. Pushing end button 56 may cause any excess currency in money acceptor 60 to be released to the player through bin 40, cause printer 50 to print a monetary voucher for redemption by the authorized gaming location, or terminate the gaming device's ability to deduct further funds from the player's financial account 152.

As shown in Fig. 2, the component devices within gaming device 10 are controlled by a microprocessor 100. Microprocessor 100 is capable of bidirectional digital communication with variable display 20, instant ticket dispensers 30a...30c, printer 50, money acceptor 60, instant ticket checker 72 and lottery ticket checker 74 to control the operation of and to transmit and receive data from these component devices. Communications between microprocessor 100 and the component devices may be via a data bus 106. Microprocessor 100 has an associated memory 102 for temporary storage of data during a ticket purchase transaction or a ticket verification transaction. Microprocessor 100 may also have an associated random number generator 104 for generating game numbers for quick-pick lottery tickets purchased from gaming device 10.

Winning ticket information, as well as information for verifying and authenticating gaming tickets, is stored in a central gaming processor 130. Central gaming processor 130 may have an associated database 132 for storing

information such as the serial numbers and gaming information for instant tickets, and ticket numbers and game numbers for issued lottery tickets. Central gaming processor 130 may also have a random number generator 134
5 used to issue quick-pick lottery tickets instead of random number generator 104.

Microprocessor 100 communicates with central gaming processor 130 over a network 120 via a modem 110 or other electronic communications device capable of transmitting and
10 receiving digital data over a communications network. Network 120 may be any digital communications network, external network or extranet, such as the public telephone network, the Internet, a wireless digital cellular network, satellite communications or radio link. Microprocessor can
15 also communicate over network 120 with the player's financial institution 150 to obtain information about and to deduct ticket purchase amounts from the player's financial account 152.

Figs. 3A and 3B show a method 200 of purchasing an
20 instant gaming ticket or a lottery ticket using gaming device 10. The player inserts currency, a voucher, or a credit card, debit card, smart card, or other player card, into money acceptor 60 (step 210). The money acceptor determines a monetary credit amount available to the player
25 for making ticket purchase transactions or obtains a credit approval for the player to make ticket purchase transactions (step 220). Money acceptor 60 sends a digital data signal to microprocessor 100 to indicate a monetary credit amount received by the money acceptor in the form of currency, a
30 voucher or a credit approval, and the monetary credit amount or credit approval is stored in memory 102 (step 230). The monetary credit amount or credit approval is also displayed to the player on display 20 (step 240).

Microprocessor 100 causes display 20 to provide an instruction to the player to press a button 36a...36c associated with one of instant ticket dispensers 30a...30c to issue an instant ticket from that dispenser, to press
5 lottery ticket button 52 to print and issue a lottery ticket such as a quick-pick ticket, or to insert a machine readable form which has been filled out by the player into play slip reader 80 to obtain a lottery ticket (step 250). The player selects a ticket to purchase by pressing one of the buttons
10 36a...36c or 52 on the gaming device as instructed by display 20 (step 260). If the player selects an instant ticket from an instant ticket dispenser 30a...30c, an instant ticket is delivered to the player through bin 40 (step 270). If the player selects a lottery ticket,
15 microprocessor 100 instructs printer 50 to print the ticket, which is delivered to the player through bin 54 (step 280). In the case of a quick-pick lottery ticket, the game numbers may be selected by a random number generator associated with either the microprocessor or the central gaming processor
20 (step 285).

Microprocessor 100 sends information about the selected gaming ticket, such as a serial number and game information for an instant ticket, and a ticket number and game numbers for a lottery ticket, to central gaming
25 processor 130 (step 290). Microprocessor 100 communicates with central gaming processor 130 via modem 110. The information received by central gaming processor 130 may be further processed or stored in database 132 (step 300).

Microprocessor 100 also deducts the amount of the
30 ticket purchase from the monetary credit amount stored in memory 102, or instructs financial institution 150 to deduct the ticket purchase price from financial account 152 (step 310), and determines whether there is any remaining monetary

credit (step 320). If there is remaining monetary credit, microprocessor 100 may cause display 20 to again instruct the player to press a button 36a...36c or 52 to purchase another ticket (step 250), or instruct the player to

5 terminate the ticket purchase transaction by pressing end button 56 (step 330). If there is no remaining monetary credit, the ticket purchase transaction terminates (step 335). Any amount of monetary credit not used to purchase tickets may then be delivered to the player, e.g., through

10 bin 40 (step 340), in the form of currency or a voucher to be redeemed by the authorized gaming location. Alternatively, a receipt for the deduction of the ticket purchase price from account 152 may be printed by printer 50 and delivered to the player through bin 54 (step 350). By

15 pressing end button 56, the player ensures that no further deductions will be made from the currency in money acceptor 60 or from the player's financial account, either by the player or by a subsequent player.

Figs. 4A and 4B show a method 400 of using gaming

20 device 10 to verify the winning status of an instant ticket or a lottery ticket of a type issued by gaming device 10. If the ticket is an instant ticket, the player may place the ticket into instant ticket checker 72 or ticket checking device 70 according to the indicated instructions (step

25 410). The instant ticket checker would then determine the presence of the ticket that has been inserted (step 420), and will read the machine readable gaming and verification information from the instant ticket and convert the read information into digital data (step 430). If the ticket is

30 a lottery ticket, the player may insert the ticket into lottery ticket checker 74 of ticket checking device 70 (step 440), which would read the machine readable gaming and

verification information from the lottery ticket and convert the read information into digital data (step 450).

The digital data obtained from the machine readable gaming and verification information by either the instant ticket checker or the lottery ticket checker of the ticket checking device is transmitted to microprocessor 100 (step 460), which formats the data for secure communication with the central gaming processor 130 over network 120 (step 465). The formatted data is transmitted to the central gaming processor (step 470).

Central gaming processor 130 compares received data to the ticket information stored in database 132 to determine whether or not the ticket is a winning ticket (step 480). The central gaming processor sends a return signal over network 120 to microprocessor 100 in gaming device 10 including an indication whether or not the ticket is a winning ticket (step 490). Microprocessor 100 causes display 20 to indicate to the player whether or not the ticket is a winning ticket (step 500). If the ticket is a winning ticket, display 20 may also indicate to the player where the ticket may be taken or sent for redemption (step 510). The ticket is then released and returned to the player by either the instant ticket checker or the lottery ticket checker (step 520). Alternatively, if the prize to be awarded to the winning ticket is a monetary amount less than a predetermined value, e.g., five dollars, the prize may be awarded to the player in the form of currency delivered to the player through bin 80 or a voucher printed by printed printer 50 for redemption by the authorized gaming location, and the ticket is retained by gaming device 10 (step 530).

Other embodiments are within the scope of the following claims.

What is claimed is:

- 1 1. An apparatus for dispensing and verifying
2 gaming tickets, comprising:
3 an instant ticket dispenser for dispensing an
4 instant gaming ticket to a player at a request of the
5 player;
6 a printer for dispensing a lottery ticket to the
7 player at a request of the player;
8 a ticket checking device capable of determining
9 whether either the instant gaming ticket or the lottery
10 ticket is a winning ticket based on information on the
11 instant gaming ticket or the lottery ticket read by the
12 ticket checking device.
- 1 2. The apparatus according to claim 1 further
2 comprising
3 a random number generator for randomly determining
4 game numbers for the lottery ticket.
- 1 3. The apparatus according to claim 1 further
2 comprising
3 a money acceptor for receiving money from the player
4 to purchase the instant gaming ticket or the lottery ticket.
- 1 4. The apparatus according to claim 1 further
2 comprising
3 a display for indicating to the player whether the
4 instant gaming ticket or the lottery ticket is a winning
5 ticket.

- 1 5. The apparatus according to claim 1 further
2 comprising
3 a microprocessor for controlling operation of the
4 instant ticket dispenser, the printer and the ticket
5 checking device.
- 1 6. The apparatus according to claim 5 further
2 comprising
3 a central gaming processor in communication with the
4 microprocessor for determining whether the instant gaming
5 ticket or the lottery ticket is a winning ticket.
- 1 7. The apparatus according to claim 6 wherein the
2 central gaming processor communicates with the ticket
3 microprocessor over a digital communications network.
- 1 8. The apparatus according to claim 6 wherein the
2 central gaming processor includes a database for storing
3 ticket information relating to the instant gaming ticket and
4 the lottery ticket.
- 1 9. The apparatus according to claim 5 further
2 comprising
3 a financial institution in communication with the
4 microprocessor, the financial institution maintaining a
5 financial account of the player by which gaming transactions
6 are made.

1 10. An apparatus for dispensing and verifying
2 gaming tickets, comprising:
3 an instant ticket dispenser for dispensing an
4 instant gaming ticket to a player at a request of the
5 player;
6 a printer for dispensing a lottery ticket to the
7 player at a request of the player;
8 an instant ticket checking device capable of
9 determining whether the instant gaming ticket is a winning
10 instant gaming ticket based on information on the instant
11 gaming ticket read by the instant ticket checking device;
12 and
13 a lottery ticket checking device capable of
14 determining whether the lottery ticket is a winning lottery
15 ticket based on information on the lottery ticket read by
16 the lottery ticket checking device.

1 11. The apparatus according to claim 10 further
2 comprising
3 a microprocessor for controlling operation of the
4 instant ticket dispenser, the printer, the instant ticket
5 checking device and the lottery ticket checking device.

1 12. The apparatus according to claim 11 further
2 comprising
3 a central gaming processor in communication with the
4 microprocessor for determining whether the instant gaming
5 ticket or the lottery ticket is a winning ticket.

1 13. The apparatus according to claim 12 wherein the
2 central gaming processor communicates with the
3 microprocessor over a digital communications network.

1 14. The apparatus according to claim 12 wherein the
2 central gaming processor includes a database for storing
3 ticket information relating to the instant gaming ticket and
4 the lottery ticket.

1 15. The apparatus according to claim 11 further
2 comprising
3 a financial institution in communication with the
4 microprocessor, the financial institution maintaining a
5 financial account of the player by which gaming transactions
6 are made.

1 16. A method of dispensing and verifying gaming
2 tickets, comprising:
3 dispensing either an instant gaming ticket or a
4 lottery ticket from a gaming device at a request of a
5 player;
6 storing information about the dispensed instant
7 gaming ticket or lottery ticket at a location remote from
8 the gaming device;
9 placing the dispensed instant gaming ticket or
10 lottery ticket into a ticket checking device connected to
11 the gaming device, the ticket checking device capable of
12 reading information on the dispensed instant gaming ticket
13 or lottery ticket;
14 comparing information on the dispensed instant
15 gaming ticket or lottery ticket to the information stored at
16 the remote location; and
17 providing an indication whether the dispensed
18 instant gaming ticket or lottery ticket is a winning ticket
19 based on the comparison of the information on the dispensed
20 instant gaming ticket or lottery ticket to the information
21 stored at the remote location.

1 17. The method of claim 16 further comprising
2 detecting the presence of the dispensed instant
3 gaming ticket or lottery ticket in the ticket checking
4 device.

1 18. The method of claim 16 further comprising
2 converting the information read from the dispensed
3 instant gaming ticket or lottery ticket into digital data;
4 and
5 transmitting the digital data to the remote
6 location.

1 19. The method of claim 18 further comprising
2 formatting the digital data for secure transmission
3 to the remote location.

1 20. The method of claim 16 further comprising
2 transmitting the indication whether the dispensed
3 instant gaming ticket or lottery ticket is a winning ticket
4 from the remote location.

1 21. The method of claim 16 wherein the providing
2 the indication whether the dispensed instant gaming ticket
3 or lottery ticket is a winning ticket includes displaying
4 the indication to the player.

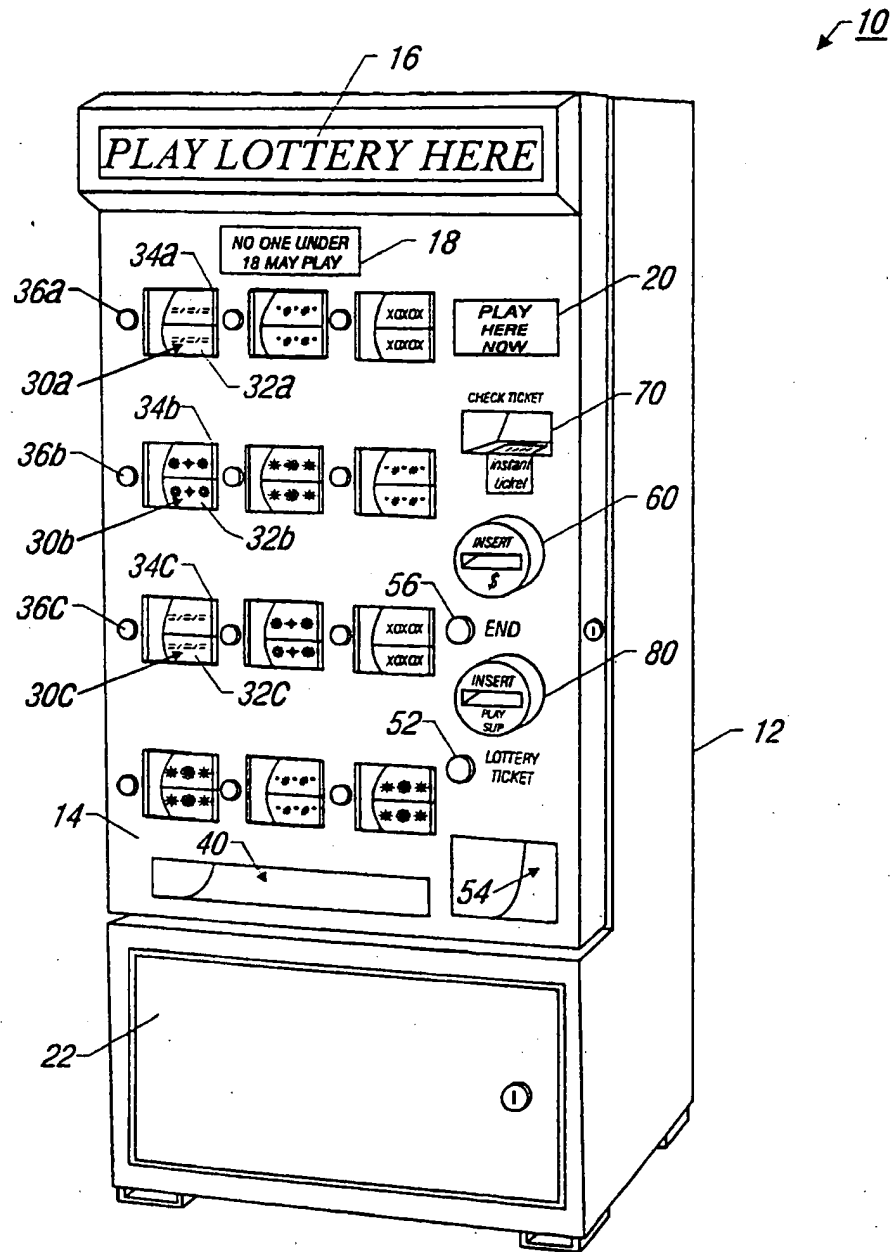
1 22. The method of claim 16 further comprising
2 awarding the player a currency prize from the gaming
3 device.

1 23. The method of claim 16 further comprising
2 awarding the player a voucher from the gaming device
3 to redeem a prize.

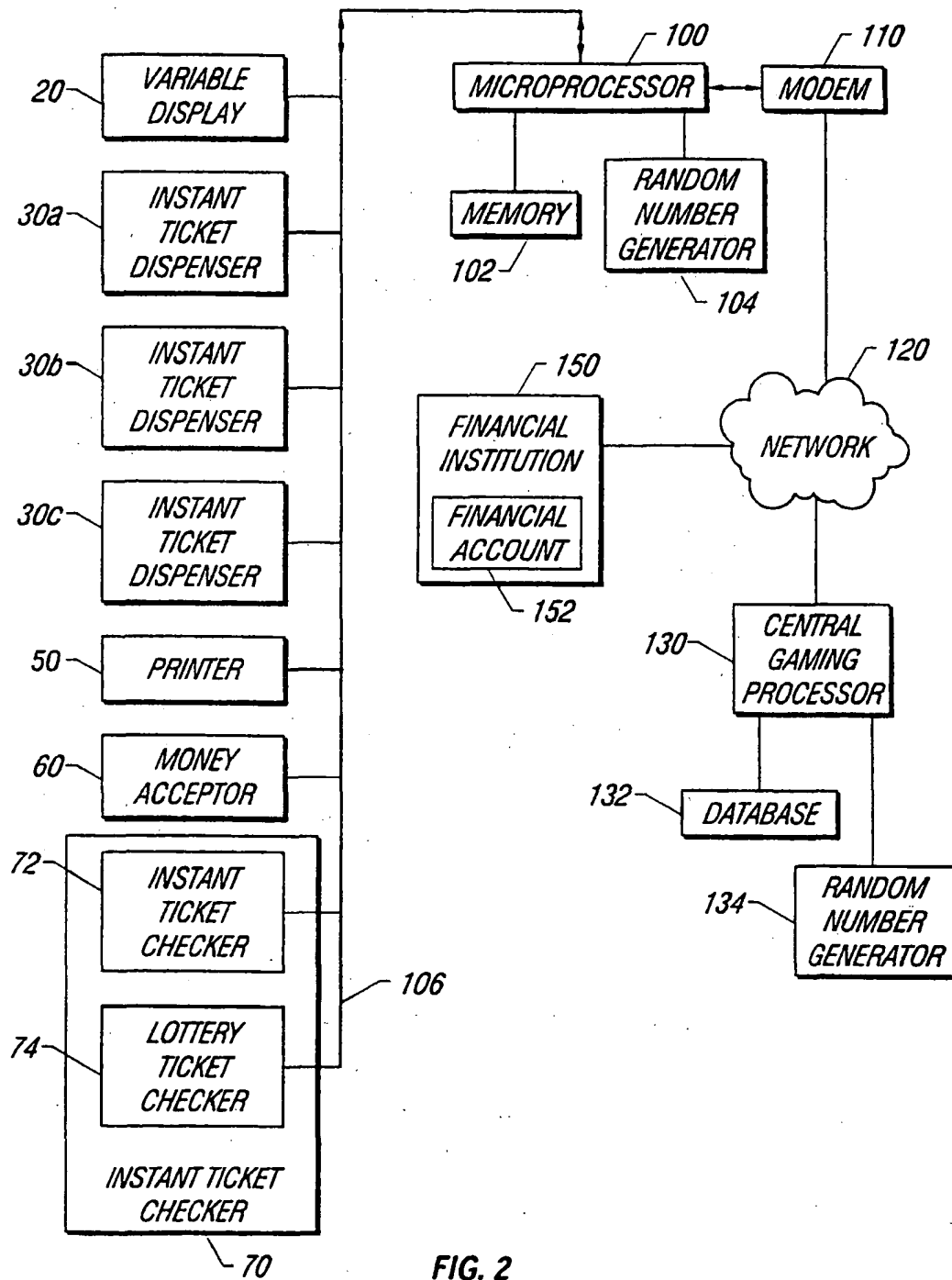
1 24. The method of claim 16 further comprising
2 sending the information about the dispensed instant
3 gaming ticket or lottery ticket stored in the remote
4 location from the gaming device to the remote location.

1 25. The method of claim 16 further comprising
2 accepting money from the player to dispense the
3 instant gaming ticket or lottery ticket from the gaming
4 device.

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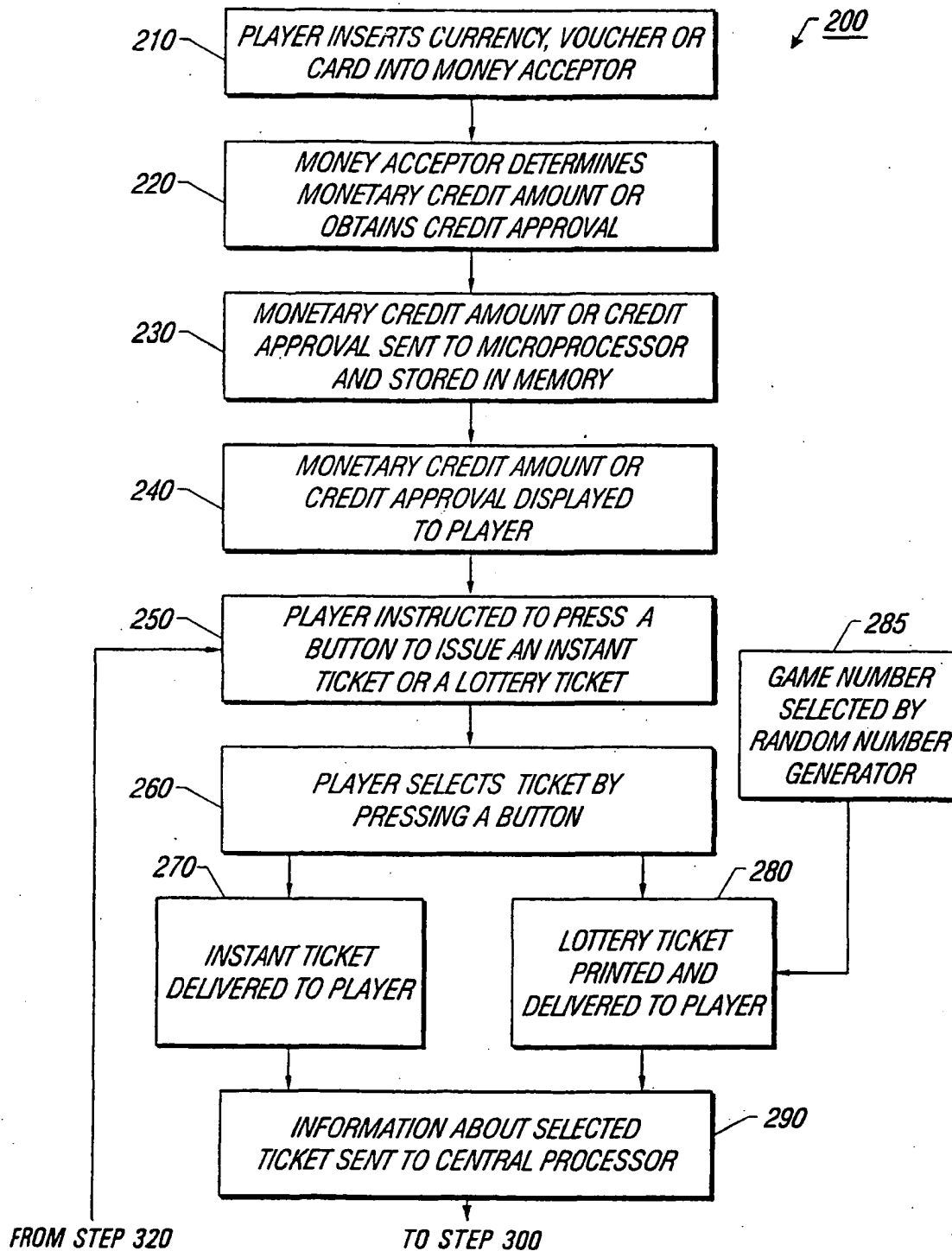


FIG. 3A

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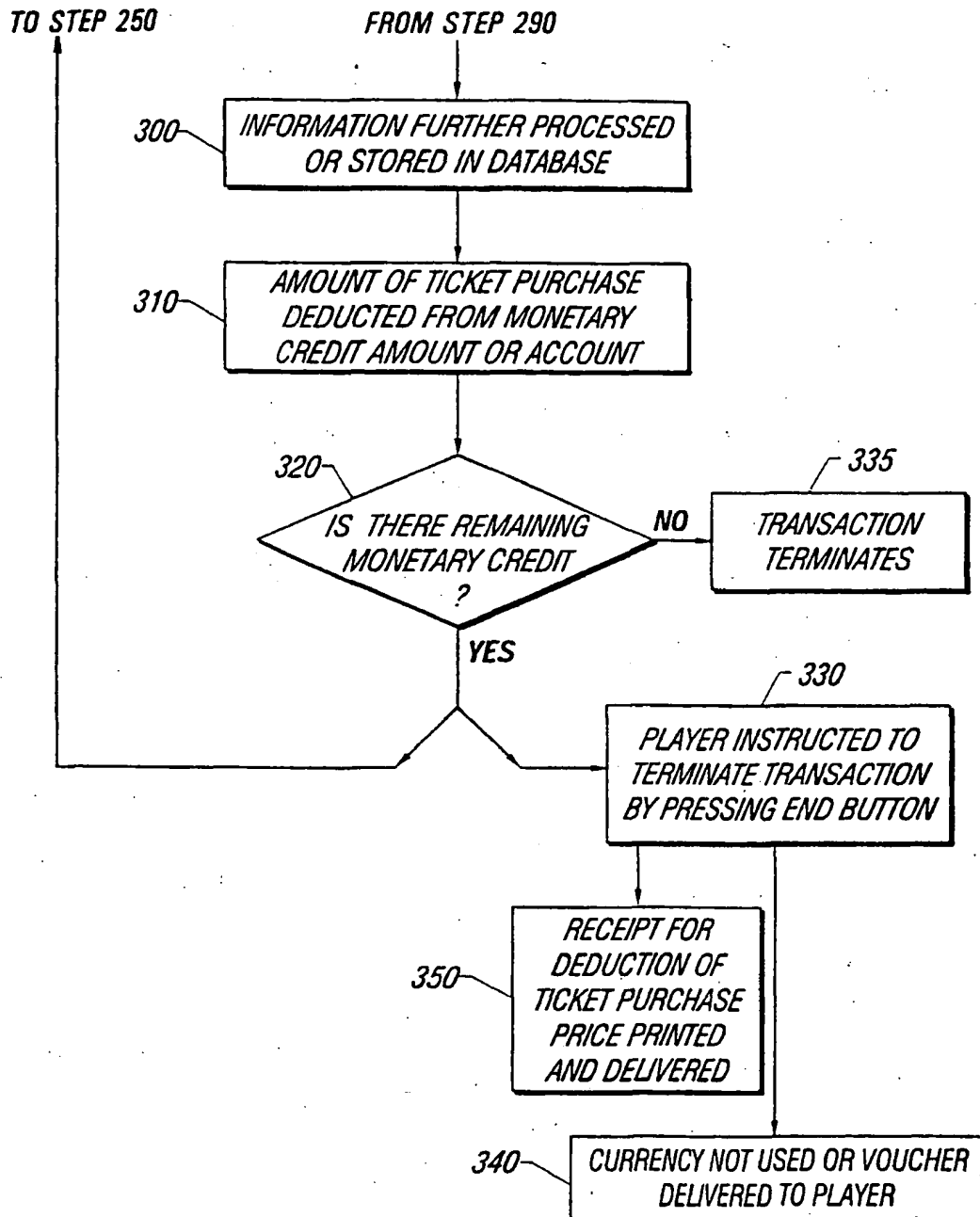


FIG. 3B

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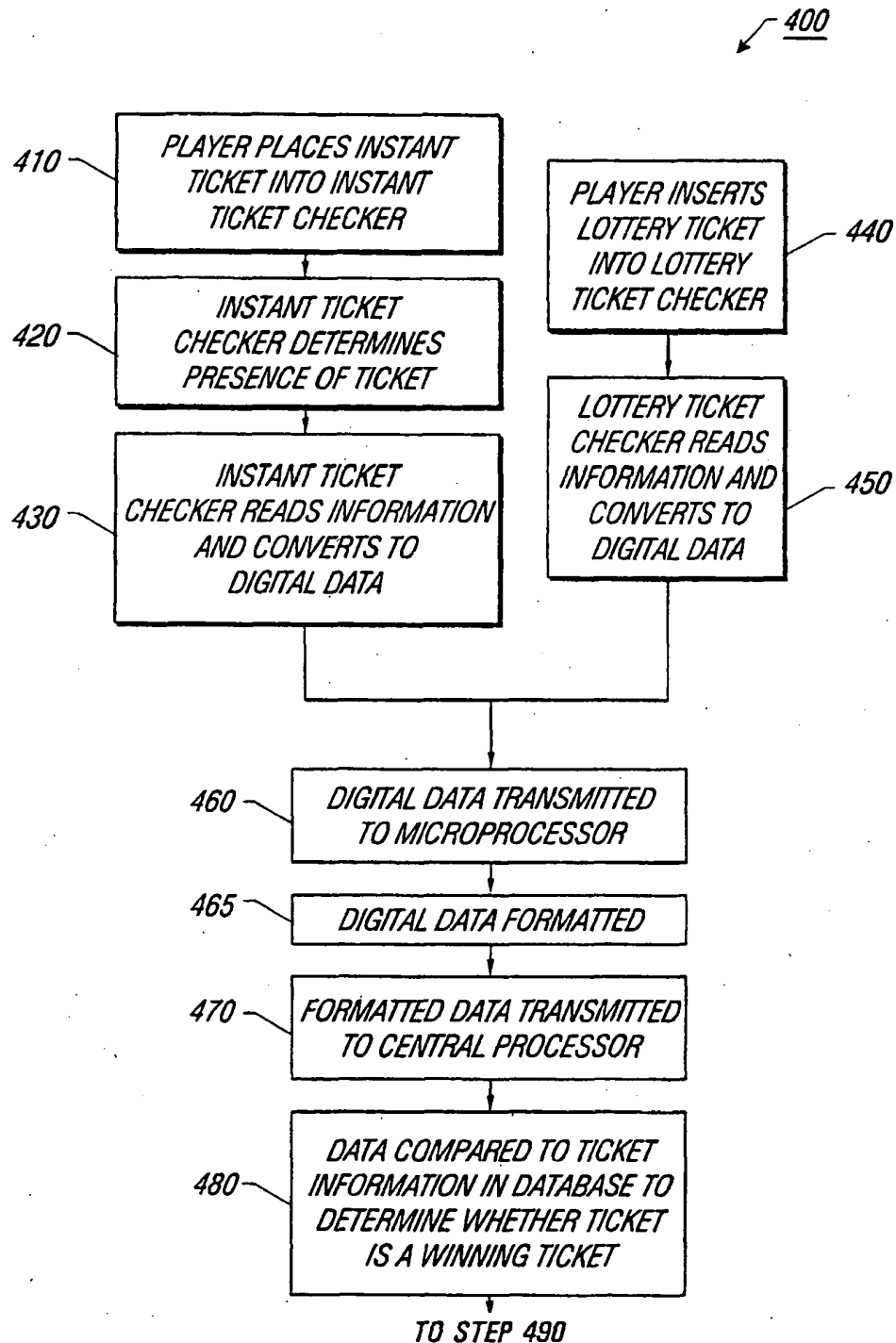


FIG. 4A

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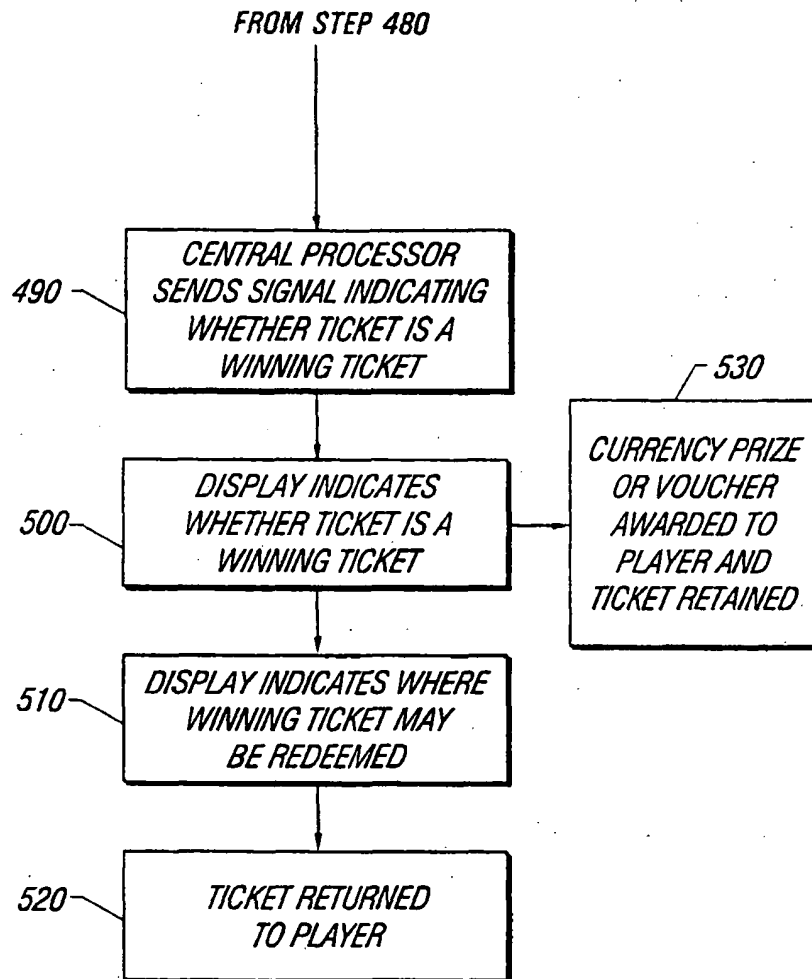


FIG. 4B

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/42264

A. CLASSIFICATION OF SUBJECT MATTER												
IPC(7) : G06F 17/00												
US CL : 463/17												
According to International Patent Classification (IPC) or to both national classification and IPC												
B. FIELDS SEARCHED												
Minimum documentation searched (classification system followed by classification symbols) U.S. : 463/16, 17, 41, 42; 273/269, 270, 138.1, 139												
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched												
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)												
C. DOCUMENTS CONSIDERED TO BE RELEVANT												
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.										
X	US 5,772,510 A (ROBERTS) 30 June 1998 (30.06.1998), entire document.	1-3, 16-18, 20, 24, 25										
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Y		4-15, 19, 21-23										
Y	US 5,417,424 A (SNOWDEN et al.) 23 May 1995 (23.05.1995), entire document.	4, 8, 10-15, 21										
Y	US 5,119,295 A (KAPUR) 02 June 1992 (2.06.1992), column 3, lines 32-40.	19										
Y	US 5,902,983 A (CREVELT et al.) 11 May 1999 (11.05.1999), column 4 lines 2-4, column 10 lines 55-67.	9, 15, 22, 23										
A	US 5,871,398 A (SCHNEIER et al.) 16 February 1999 (02.02.1999), entire document.	1-25										
A	US 5,772,511 A (SMELTZER) 30 June 1998 (30.06.1998), entire document.	1-25										
A	US 5,222,624 A (BURR) 29 June 1993 (29.06.1993), entire document.	1-25										
A	US 5,158,293 A (MULLINS) 27 October 1992 (27.10.1992), entire document.	1-25										
☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.												
* Special categories of cited documents: <table border="0"> <tr> <td>"A" document defining the general state of the art which is not considered to be of particular relevance</td> <td>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>"E" earlier application or patent published on or after the international filing date</td> <td>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td> </tr> <tr> <td>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>"O" document referring to an oral disclosure, use, exhibition or other means</td> <td>"&" document member of the same patent family</td> </tr> <tr> <td>"P" document published prior to the international filing date but later than the priority date claimed</td> <td></td> </tr> </table>			"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family	"P" document published prior to the international filing date but later than the priority date claimed	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention											
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone											
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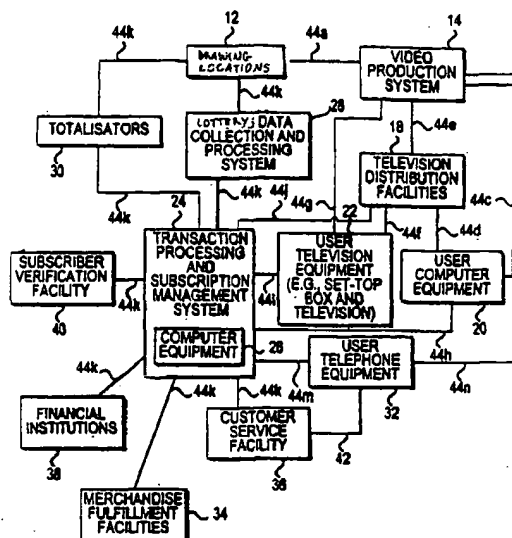
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(54) Title: SYSTEMS AND METHODS FOR PRESENTING A LOTTERY INTERFACE IN AN INTERACTIVE WAGERING APPLICATION



(57) Abstract: Interactive wagering systems and methods are provided for giving a user the ability to participate in lotteries using user equipment. An interactive wagering application may provide the user with a listing of lotteries in which the user may participate. The user may select to participate in any one or more of the lotteries. The interactive wagering application may give the user the ability to automatically participate in lotteries using default lottery numbers or randomly generated lottery numbers. The interactive wagering application may provide notifications to the user when a lottery drawing is about to begin.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

SYSTEMS AND METHODS FOR PRESENTING A
LOTTERY INTERFACE IN AN INTERACTIVE
WAGERING APPLICATION

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This application claims the benefit of U.S.
provisional application No. 60/194,801, filed
April 5, 2000, which is hereby incorporated by
10 reference herein in its entirety.

Background of the Invention

This invention relates to an interactive
wagering service, and more particularly, this invention
15 relates to an interactive wagering service having an
interactive wagering application with a lottery
interface feature.

Conventionally, lotteries are played by
participants who must manually enter numbers on a form.
20 The form must then be submitted, with payment, to an
appropriate location, which requires the lottery
participant to travel. In exchange for the payment,
the participant receives a lottery ticket. This
creates inconvenience for the participant because of
25 the time and energy that must be expended to enter a
lottery. In addition, when lotteries have relatively
large jackpots, participants may be forced to spend an
even greater amount of time waiting in line to purchase
a lottery ticket.

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Moreover, because the lottery ticket is the only proof that the participant has played a particular set of numbers, loss of the lottery ticket translates into a loss of any potential winnings.

5 Horse race wagering has been made more efficient by allowing participants to use their televisions to place wagers, rather than having to travel to a racetrack or other such establishment. This is shown by, for example, U.S. patent
10 No. 5,830,068 (Brenner et al.).

It is therefore an object of the present invention to allow participants of a lottery to purchase lottery tickets in a more convenient and efficient manner.

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Summary of the Invention

This and other objects of the present invention are accomplished by providing an interactive wagering application that gives a user the ability to
20 participate in lotteries electronically using user equipment.

The interactive wagering application may provide the user with a listing of lotteries in which the user may legally participate. The user may be
25 given the ability to participate in any one or more of these lotteries. The interactive wagering application may display, for each lottery, a customized display screen requesting any required information for participation in that particular lottery.

30 The interactive wagering application may record the lottery drawing of a particular lottery for the user. The interactive wagering application may remind the user when a particular lottery drawing is about to begin. The reminder may be communicated using

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any suitable notification, such as by a pop-up overlay on a television display, by email, by instant message, by an icon appearing on a display, by telephone, or by any other suitable notification.

- 5 The interactive wagering application may provide the user the ability to set default numbers, and any other required parameters, for one or more particular lotteries. The interactive wagering application may use the default numbers to
- 10 automatically participate in the particular lotteries. In another suitable approach, the interactive wagering application may randomly generate numbers each time a lottery is played.

- The interactive wagering application may
- 15 participate in a particular lottery every time the lottery is offered. In another suitable approach, the participation may be based on conditions (e.g., time period elapsed since last participating, type of prize, odds, etc.).

- 20 The interactive wagering application may also provide the user with the ability to generate lottery gift certificates.

Brief Description of the Drawings

- 25 The above and other objects of the present invention will be apparent upon consideration of the following detailed description, taken in conjunction with the accompanying drawings, in which like reference characters refer to like parts throughout, and in
- 30 which:

FIG. 1 is a schematic diagram of an illustrative interactive wagering system in accordance with one embodiment of the present invention;

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FIG. 2 is a schematic diagram of illustrative user television equipment in accordance with one embodiment of the present invention;

FIG. 3 is a schematic diagram of additional illustrative user television equipment in accordance with one embodiment of the present invention;

FIG. 4 is a schematic diagram of illustrative user computer equipment in accordance with one embodiment of the present invention;

FIG. 5 is a diagram of an illustrative user cellular telephone equipment in accordance with one embodiment of the present invention;

FIG. 6 is a schematic diagram of illustrative user equipment in accordance with one embodiment of the present invention;

FIG. 7 shows an illustrative interactive wagering application display screen in which the user may select a lottery in accordance with one embodiment of the present invention;

FIG. 8 shows an illustrative interactive wagering application display screen in which the user may play a lottery in accordance with one embodiment of the present invention;

FIG. 9 is a flow chart of illustrative steps involved in providing the user with the ability to play a lottery in accordance with the one embodiment of the present invention;

FIG. 10 is a flow chart of illustrative steps involved in allowing the user to automatically participate in a lottery using default numbers in accordance with one embodiment of the present invention;

FIG. 11 is a flow chart of illustrative steps involved in allowing the user to participate in

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lotteries based on conditions in accordance with one embodiment of the present invention;

FIG. 12 shows an illustrative interactive wagering application display screen on which a reminder pop-up overlay window is displayed in accordance with one embodiment of the present invention;

FIG. 13 is a flow chart of illustrative steps involved in finalizing a lottery bet in accordance with one embodiment of the present invention;

FIG. 14A shows an illustrative interactive wagering application display screen with results for a lottery in accordance with one embodiment of the present invention;

FIG. 14B shows another illustrative interactive wagering application display screen with results for a lottery in accordance with one embodiment of the present invention;

FIG. 15 shows an illustrative interactive wagering application display screen that may provide the user with notification options in accordance with one embodiment of the present invention.

Detailed Description of the Preferred Embodiments

An illustrative interactive wagering system 10 in accordance with the present invention is shown in FIG. 1. Aspects of the invention apply to various different types of wagering, but are described herein primarily in the context of interactive wagering on lotteries (e.g., Pick-4, keno) for specificity and clarity.

Lottery drawings may be held at drawing location 12 that may be located at various geographic locations. Lottery drawings held at drawing locations 12 may be simulcast to television viewers.

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For example, simulcast videos may be provided to users with satellite receivers or to other suitable establishments via satellite.

Interactive wagering system 10 may be used to
5 provide an interactive wagering service to users of various user equipment. An interactive wagering application may be used to provide users with the ability to use the interactive wagering service. In one suitable approach, the interactive wagering
10 application may run locally on user equipment. User equipment may include a set-top box, a personal computer, a cellular telephone, a handheld computing device, or any other suitable device. In another suitable approach, the interactive wagering application
15 may run using a client-server or distributed architecture where a portion of the interactive wagering application may be implemented locally on the user equipment in the form of, for example, a client process. Another portion of the interactive wagering
20 application may be implemented at a remote location, such as on a server or any other suitable equipment as, for example, a server process. These arrangements are merely illustrative. Any other suitable arrangement for implementing the interactive wagering application
25 may be used.

Real-time videos from drawing locations 12 may be provided to video production system 14 for distribution to users as part of an interactive television wagering service. For example, the videos
30 may be provided via a wagering-related television channel, via an Internet-delivered service, or via any other suitable technique. In one suitable approach, multiple simulcast videos may be provided to video production system 14 in real-time.

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In one suitable approach, video production system 14 or a separate facility may be used to reformat simulcasts from drawing locations 12. For example, if drawing locations 12 provide simulcasts as traditional analog television channels, video production system 14 (or a separate facility) may convert these simulcasts or portions of these simulcasts into digital signals (e.g., digital video signals) or into a different number of analog signals. Digital video signals may require less bandwidth than analog video signals and may be appropriate for situations in which videos are to be transmitted over either high or low bandwidth pathways. Low bandwidth pathways may include telephone lines, the Internet, or any other suitable pathway.

Video production system 14 may be used to provide an interactive television wagering service that may include selected simulcast videos, and graphic overlays to television distribution facilities 18 (for redistribution to user television equipment 22 and user computer equipment 20), to user computer equipment 20, and to user telephone equipment 32 (if user telephone equipment 32 has a display capable of displaying moving images). Television distribution facilities 18 may be any suitable facilities for supplying television to users, such as cable system headends, satellite systems, broadcast television systems, or other suitable systems or combinations of such systems. User computer equipment 20 may be any suitable computer equipment that supports an interactive wagering application. For example, user computer equipment 20 may be a personal computer. User computer equipment 20 may be based on a mainframe computer, a workstation, a networked computer or computers, a laptop computer, a

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notebook computer, a handheld computing device such as a personal digital assistant or other small portable computer, or any other suitable equipment.

Each of television distribution facilities 18 is typically located at a different geographic location. Users with user television equipment 22 may receive the interactive television wagering service from an associated television distribution facility. User television equipment 22 may include, for example, a television or other suitable monitor. A television may be used to watch the interactive television wagering service on a traditional analog television channel. User television equipment 22 may include a digital or analog set-top box connected to a television distribution facility 18 by, for example, a cable path. A digital set-top box may be used to receive the interactive television wagering service on a digital channel. In one suitable approach, user television equipment 22 may contain a satellite receiver, a WebTV[®] box, a personal computer television (PC/TV), or hardware similar to such devices into which set-top box capabilities have been integrated. A recording device such as a videocassette recorder or digital recording device (e.g., a personal video recorder (PVR) or digital video recorder (DVR) based on hard disk drives or the like) may be used in user television equipment 22 to store videos. The recording device may be separate from or part of the other components of user television equipment 22.

Illustrative user television equipment 46 is shown in FIG. 2. Set-top box 50 may receive television programming and data at input 48. Set-top box 50 may have analog and digital television tuning circuitry for handling analog and digital television signals.

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Television signals may be passed to videocassette recorder 54, that may be separate from the hardware (i.e., set-top box 50) that implements the interactive television wagering application, for recording. Set-top box 50 may control the operation of videocassette recorder 54. For example, set-top box 50 may issue infrared commands that are received by videocassette recorder 54 at the same inputs at which standard remote control commands are received.

10 Videocassette recorder 54 may be connected to television 58. Television programming and graphic display screens generated by applications implemented using set-top box 50 may be passed from set-top box 50 to television 58 through videocassette recorder 54.

15 Set-top box 50 may include memory and processing circuitry. This may allow set-top box 50 to be used to implement applications that support an interactive wagering application, interactive television wagering service, interactive television
20 program guide, web browsing and Internet access, other services such as home shopping, home banking, and video-on-demand services, or any other suitable service.

 A remote control 60 such as an infrared
25 remote control may be used to control set-top box 50, videocassette recorder 54, and television 58. Remote control 60 may have buttons 62 such as a power button, right, left, up, and down arrow keys, an OK or select key, a favorites or fav key, a lock or parental control
30 key, and any other suitable key.

 Illustrative user television equipment 66 based on a digital video recorder 70 is shown in FIG. 3. Digital video recorder 70 may receive television programming and may access interactive

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services using input 68. Digital video recorder 70 may have analog and digital tuning circuitry to receive and process television signals. Digital video recorder 70 may be used to record television programs in any
5 suitable format. For example, digital videos may be stored using the MPEG-2 format.

Recorded videos or real-time videos from input 72 may be displayed on television 74 or any other suitable monitor. A remote control 76 such as an
10 infrared remote control may be used to control digital video recorder 70 and television 74. Remote control 76 may have buttons such as a power button, right, left, up, and down arrow keys, an OK or select key, a favorites or fav key, a lock or parental control key,
15 and any other suitable key.

Digital video recorder 70 has memory and processing circuitry that may allow digital video recorder 70 to be used to implement applications that support an interactive wagering application,
20 interactive television wagering service, interactive television program guide, web browsing and Internet access, other services such as home shopping, home banking, and video-on-demand services, or any other suitable service. Television programming and display
25 screens generated by interactive applications may be displayed on television 74.

Referring back to FIG. 1, user computer equipment 20 may receive the interactive television wagering service using a video card or any other
30 suitable video-capable equipment to receive analog or digital (e.g., moving picture experts group or MPEG) videos from a television distribution facility 18. User computer equipment 20 may receive the interactive television wagering service directly from video

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production system 14 using, for example, a modem link. In one suitable approach, the video for the interactive television wagering service may be compressed, for example, using MPEG techniques. This may be useful, for example, if the path to user computer equipment 20 is a modem connection using telephone links. If video production system 14 is only used to serve user computer equipment 20 without traditional analog television capabilities, video production system 14 may only need to supply such digitally-compressed video signals and not analog television signals.

Illustrative user computer equipment 77 is shown in FIG. 4. User computer equipment 77 may be based on a personal computer 80 or any other suitable computing device. Personal computer 80 may receive television programming and information for interactive services using input 78. Personal computer 80 may contain a tuner card 82 or any other suitable circuitry for handling analog and digital television signals. Personal computer 80 may contain memory and processing circuitry that may allow personal computer 80 to be used to implement applications that support an interactive wagering application, interactive television wagering service, interactive television program guide, web browsing and Internet access, other services such as home shopping, home banking, video-on-demand services, or any other suitable service. Personal computer 80 may contain a storage device such as a hard disk drive to store videos. Television signals and screens generated by interactive applications may be displayed on monitor 84.

The user may interact with personal computer 80 using any suitable user input interface, such as keyboard 86, a pointing device such as a

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trackball, mouse, or touch pad, a voice recognition system, a handwriting recognition system, or any other suitable user input interface. In one suitable approach, the user may interact with personal

5 computer 80 using a wireless remote control such as remote control 88. Remote control 88 may be, for example, an infrared remote control.

Referring back to FIG. 1, video clips of lottery drawings and other simulcast information may be
10 provided to users in the form of an interactive television wagering service or by an interactive wagering service provided by the interactive wagering application. In one suitable approach, lottery-related videos may be provided to the user by using video
15 production system 14 or any other suitable equipment to route appropriate video clips from the simulcasts to the user in real-time. Video clips may be stored for later viewing. For example, one or more video servers located at drawing locations 12, video production
20 system 14, television distribution facilities 18, or at any other suitable location may be used to store video clips. The stored videos may then be played back in real-time or downloaded for viewing at user television equipment 22, user computer equipment 20, or user
25 telephone equipment 32. The video clips may contain videos of lottery drawings, commentary, interviews with jackpot winners, or any other suitable lottery-related information. In one suitable approach, real-time or stored videos may be provided from drawing locations 12
30 directly to user television equipment 22, user computer equipment 20, or user telephone equipment 32 over the Internet or via any other suitable communications paths without involving video production system 14. Videos may be provided by routing video signals through

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equipment located elsewhere in interactive wagering system 10. For example, videos may be routed through transaction processing and subscription management system 24.

5 Transaction processing and subscription management system 24 may contain computer equipment 26 and other equipment for supporting system functions such as transaction processing (e.g., handling tasks related to wagers, product purchasing, adjusting the
10 amount of funds in user accounts based on the outcomes of wagers, video clip ordering, or any other suitable task), data distribution (e.g., for distributing lottery data to the users), and subscriber management (e.g., features related to opening an account for a
15 user, closing an account, allowing a user to add or withdraw funds from an account, changing the user's address or personal identification number, or any other suitable feature). Databases within transaction processing and subscription management system 24 or
20 associated with system 24 may be used to store lottery data, wagering data and other transaction data, and subscriber data such as information on the user's current account balance, past wagering history, individual wager limits, personal identification
25 number, billing addresses, credit card numbers, bank account numbers, social security numbers, or any other suitable information. Using such databases may allow the user to access information more quickly and may allow for central administration of the interactive
30 wagering service.

In one suitable approach, totalisators 30 may be used for processing odds and payoff amounts related to paramutual-based lotteries.

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In one suitable approach, lottery drawing videos and other services may be provided using servers and other equipment located at transaction processing and subscription management system 24. For example, 5 video clips may be provided to the user on-demand. Interactive advertisements may be provided to the user. When the user selects a desired advertisement, transaction processing and subscription management system 24 may provide additional information or other 10 services related to the advertisement to the user.

Product ordering services may be implemented using computer equipment 26 at transaction processing and subscriber management system 24 to handle orders and to assist in adjusting the appropriate account of 15 the user accordingly. Orders may be fulfilled using merchandise fulfillment facilities 34. Merchandise fulfillment facilities 34 may be operated solely to provide merchandise fulfillment or may be associated with independently-operated mail-order or on-line 20 businesses. Similar facilities may be used to allow users to order services.

Statistical lottery data such as the drawing times for each lottery, type of lottery, location of lottery, or any other suitable information, may be 25 provided by lottery data collection and processing system 28. Some of the data may be collected from drawing locations 12 and some may be provided by third party information sources.

Transaction processing and subscription 30 management system 24 may provide the lottery data to users at user television equipment 22, user computer equipment 20, and user telephone equipment 32 for use in following lottery results and developing wagers. In one suitable approach, lottery data may be provided to

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users using paths that do not directly involve transaction processing and subscription management system 24. For example, lottery data may be provided from lottery data collection and processing system 28 to user television equipment 22, user computer equipment 20, or user telephone equipment 32 using the Internet or other suitable communications paths.

User telephone equipment 32 may be a conventional telephone, a cordless telephone, a cellular telephone or other portable wireless telephone, or any other suitable telephone equipment. Users at user television equipment 22 and user computer equipment 20 may view information on the lottery data on a television or other suitable monitor. Users at user telephone equipment 32 may listen to lottery data using an interactive voice system. User telephone equipment 32 may be based on cellular telephones with displays. Users may view lottery data displayed on such displays.

An illustrative cellular telephone 90 with which the user may use the interactive wagering application is shown in FIG. 5. A portion of the software that is used to implement the interactive wagering service may be resident on cellular telephone 90. Cellular telephone 90 may have a recording device for storing software instructions and videos. Cellular telephone 90 may also have a processor for executing the instructions and displaying the videos.

Cellular telephone 90 may have an antenna 92 to support wireless communications with transaction processing and subscription management system 24, customer service facility 36, or video production system 14, as shown in FIG. 1. A power switch 94 may

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be used to turn cellular telephone 90 on and off. A speaker 96 may allow the user to listen to conversations and to listen to audio prompts from, for example, transaction processing and subscription management system 24, as shown in FIG. 1. A microphone 98 may allow the user to converse with others. Display 100 may be a liquid crystal display (black and white or color), a plasma display, a light-emitting diode display, an active matrix display, or any other suitable type of small display screen. Keys 102 may allow the user to enter inputs. Numeric keys 102, including the star and pound key, may allow the user to respond to interactive voice response system prompts, such as "press 3 to select lottery 3," and may allow the user to enter numbers to select numerically identified on-screen menu options and the like that are displayed on display 100. In one suitable approach, some of the numeric keys 102 may perform secondary functions if, for example, they are pressed and held for at least a predetermined length of time. Clear key 104 may be used to clear characters from display 100. If the user presses and holds clear key 104, the user may be taken back to the initial screen displayed on display 100 upon power up. Navigation key 106 may be used to access menus, make telephone calls, or perform any other suitable function. Scroll keys 108 may be used to scroll through menus and to scroll through other items presented on display screen 100.

A generalized schematic diagram of user equipment, such as user television equipment 22, user computer equipment 20, and user telephone equipment 32 of FIG. 1, is shown in FIG. 6. Control circuitry 112 and memory and storage 114 may have communications,

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memory, and processing circuitry suitable for supporting functions such as receiving television programming, recording videos in storage, and accessing interactive services over line 110. Line 110 may be
5 coupled to communications paths such as paths 42, 44c, 44d, 44f-i, 44m, and 44n of FIG. 1. Television programming and text, graphics, and video associated with interactive services may be presented to the user using display 116. Display 116 may be a
10 television, a computer monitor, or any other suitable display equipment.

The user may interact with control circuitry 112 using any suitable user input device 118, such as a remote control, a keyboard, a wireless
15 keyboard, a display remote, a handheld computer, a mouse, a trackball, a touch pad, or any other suitable input device.

Referring back to FIG. 1, users who wish to place wagers may establish an account at transaction
20 processing and subscription management system 24. An account may be established at one of totalisators 30. The user and the interactive wagering services provider may have their own bank accounts at financial institutions 38. A user may set up an account
25 electronically by using user television equipment 22, user computer equipment 20, or user telephone equipment 32 to interact with the subscriber management functions of transaction processing and subscription management system 24. In another suitable approach,
30 accounts may be established with the interactive wagering service with the assistance of customer service representatives at customer service facility 36. Customer service facility 36 may be at the same location as transaction processing and

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subscription management system 24, may be a part of system 24, or may be located remote from system 24. Customer service representatives at customer service facility 36 may be reached by telephone. If user
5 telephone equipment 32 is used to access the interactive wagering service, for example, user telephone equipment 32 may be used to reach the customer service representative using communications path 42. If user television equipment 22 or user
10 computer equipment 20 is being used with the interactive wagering service, a telephone at the same location as that equipment may be used to reach the customer service representative.

The user's identity may be checked using
15 social security number information or other identification information with the assistance of subscriber verification facility 40. The services of subscriber verification facility 40 are used to ensure that the user lives in a geographic area in which
20 wagering is legal, that the user is of a legal age, and that the identification information, for example, the user's social security number, matches the name provided by the user. If the user is using a cellular telephone or handheld computing device, the user's
25 present physical location may be determined by determining which general part of the cellular telephone network is being accessed by the user. In another suitable approach, the user's present physical location may be determined by using the cellular
30 network or a handset-based location device, such as a global positioning system (GPS) receiver in the body of the cellular telephone, to pinpoint the user's location. This location information may be used to

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verify that the user is located in a geographic area where wagering is legal.

In a typical enrollment process, the user may provide personal information to the interactive
5 wagering service and provide funds with a credit card or funds from the user's bank account. The interactive wagering service may set up an account for the user at transaction processing and subscription management
10 system 24 and may direct one of totalisators 30 to set up a new account for the user at the totalisator. The totalisator may be directed to credit the user's account to reflect the amount of funds provided by the user. After the user places a wager and wins or loses, the totalisator may adjust the user's totalisator
15 account to reflect the outcome of the wager. The totalisator may periodically inform the interactive wagering service of the adjusted balance in the user's account. This may be accomplished using any suitable technique, for example, periodically, continuously, on-
20 request, or by any other suitable technique. In one suitable approach, reports may be collected periodically, for example, once a day in an end-of-day report, and provided to the interactive wagering service to reconcile the account balances at
25 transaction processing and subscription management system 24 with the account balances at totalisators 30.

If the user makes a balance inquiry, the inquiry may be passed to the appropriate totalisator by transaction processing and subscription management
30 system 24. If the user is charged a fee for subscribing to the service, the service may debit the fee from the user's account at the transaction processing and subscription management system 24.

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The accounts at totalisators 30 and transaction processing and subscription management system 24 may be maintained separately because the business entities that operate totalisators 30 and transaction processing and subscription management system 24 are independent. In one suitable approach, financial functions related to opening and maintaining user accounts and the like may be handled using computer equipment at another location, such as one of financial institutions 38 or any other suitable location remote from totalisators 30 and transaction processing and subscription management system 24. In another suitable approach, such financial functions may be implemented primarily at a totalisator 30 or primarily at the transaction processing and subscription management system 24.

Users at user television equipment 22, user computer equipment 20, and user telephone equipment 32 may place wagers by providing wagering data and by otherwise interacting with transaction processing and subscription management system 24. The interactive wagering service may provide a user at user television equipment 22, user computer equipment 20, or user telephone equipment 32 that has display capabilities with screens containing various lottery data. For example, the user may be presented with screens that allow the user to view the current odds for an upcoming lottery.

The interactive wagering service may provide the user with interactive screens containing menus and selectable options that allow the user to specify the type of wager in which the user is interested and the desired wager amount. With a set-top box arrangement, for example, the user may use a remote control or

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wireless keyboard to navigate the various menus and selectable options. With a personal computer, the user may use a keyboard, mouse, trackball, touch pad, or other suitable input or pointing device. With a
5 cellular telephone with a display, the user may use buttons on the telephone. When the user has made appropriate selections to define a desired wager, user television equipment 22, user computer equipment 20, or user telephone equipment 32 may transmit wagering data
10 for the wager to transaction processing and subscription management system 24.

Users with telephones may interact with the interactive wagering service using an interactive voice response system located at transaction processing and
15 subscription management system 24. The interactive voice response system may present menu options to the user in the form of audio prompts, for example, "press 1 to select a \$2 wager amount" or any other suitable audio prompt. The user may interact with the
20 interactive wagering service by pressing the corresponding buttons on a touch tone telephone. User telephone equipment 32 that is based on cellular telephones may allow the user to interact with the interactive wagering service in this way. User
25 telephone equipment 32 that is based on cellular telephones with messaging and display capabilities may allow the user to interact visually with the interactive wagering service.

The components of interactive wagering
30 system 10 may be interconnected using various communications paths 44. Communications paths 44 may include satellite paths, coaxial cable paths, fiber-optic paths, twisted pair paths, other wire or cable-based links, wireless paths through free space, or any

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other suitable paths or combination of such paths. Communications over paths 44 may involve analog transmissions, digital transmissions, wireless transmissions, microwave transmissions, radio-frequency transmissions, optical transmissions, audio transmissions, or any other suitable type of transmissions or combination of such transmissions. Communications may involve Internet transmissions, private network transmissions, packet-based transmissions, television channel transmissions, transmissions in the vertical blanking interval (VBI) of a television channel or on a television sideband, MPEG transmissions, or any other suitable type of transmissions. Communications may involve wireless pager or other messaging transmissions. Communications paths 44 may include cable connected to cable modems, digital subscriber lines, integrated services digital network (ISDN) lines, or any other suitable paths. Examples of suitable communications paths are described below. Those examples are merely illustrative. Any of the communications path arrangements described above or other suitable arrangements may be used.

Communications paths that carry video and particularly uncompressed analog video, lightly-compressed digital video, or full-screen digital video generally use more bandwidth than communications paths that carry only data or that carry partial-screen digital video. For example, to transmit high-quality simulcasts of lottery drawings from drawing locations 12 to video production system 14, analog or digital videos may be transmitted from drawing locations 12 to video production system 14 over path 44a using satellite links. Videos may be transmitted from video production system 14 to user

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computer equipment 20 over path 44c using a modem link that uses, for example, a digital subscriber line, a telephone network link, a wireless link, or any other suitable link. The modem link may be made over a
5 private network.

A user with a cable modem may connect a personal computer or other such user computer equipment 20 to an associated cable system headend using, for example, path 44d. The headend in such an
10 arrangement would be one of the television distribution facilities 18 shown in FIG. 1. The user may then receive videos from the headend via cable modem. Videos may be provided to the headend over path 44e using a network link, fiber optic links, cable links,
15 microwave links, satellite links, or any other suitable link. A user with a set-top box or similar device, shown in FIG. 1 as user television equipment 22, may receive videos from a cable system headend using a cable modem or other such communications device over
20 path 44f. A user with user television equipment 22 may receive videos over the Internet or a private network using a telephone-based modem or other such communications device using path 44g. In a system with distributed processing, interactive wagering services
25 may be provided using a television distribution facility 18 that includes equipment that supplements or replaces at least some of the equipment at transaction processing and subscription management system 24.

In one suitable approach, user television
30 equipment 22 or user computer equipment 20 may receive analog or digital videos from an associated television distribution facility over the communications paths normally used to distribute television programming, such as paths 44f and 44d, respectively. For example,

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videos may be received as part of a dedicated interactive wagering service television channel. If videos are provided as digital signals, for example, as MPEG signals, 10 or more digital videos may be carried
5 on a single analog channel. In another suitable approach, one digital video may be carried on one-tenth of the bandwidth of an analog channel. If the videos are not full-screen videos, even more videos may be simultaneously provided without a loss of image
10 quality.

Lottery drawing videos may be provided to user telephone equipment 32 over a telephone Internet link or any other suitable telephone link using path 44n.

15 In one suitable approach, lottery data may accompany the lottery drawing videos along any of these paths. Lottery drawing videos may be provided by routing them directly from drawing locations 12 to user television equipment 22, user computer equipment 20
20 (e.g., over the Internet or a private network, or any other suitable network), or user telephone equipment 32. Lottery drawing videos may be provided by routing them through transaction processing and subscription management system 24. If a cellular
25 telephone, such as cellular telephone 90, or portable computing device has sufficient display capabilities to support moving images, lottery drawing videos may be displayed. Such videos may be provided using any suitable path, such as a direct path from drawing
30 locations 12, a path through video production system 14 or other suitable video processing equipment, through a hub such as transaction processing and subscription management system 24, or through any other suitable path. Lottery drawing videos may be provided in real-

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time or may be recorded for later distribution. In another suitable approach, videos that are not provided in real-time may be downloaded by user television equipment 22, user computer equipment 20, a cellular
5 telephone, or any other suitable user equipment at a lower data rate than would otherwise be required and may be downloaded in the background. Such videos may be provided to the user at real-time video rates for direct viewing by the user.

- 10 Lottery data and other information related to the interactive wagering service may be provided to users over paths connected to transaction processing and subscription management system 24. For example, lottery data and other data for the interactive
15 wagering service may be provided to user computer equipment 20 over path 44h using a modem link. Path 44h may be a private network path or an Internet path. Path 44h may use telephone lines, digital subscriber lines, ISDN lines, wireless data paths, or
20 any other suitable type of communications links. User television equipment 22 may receive data for the interactive wagering service over communications path 44i, that may be a telephone line, digital subscriber line, ISDN line, or any other suitable type
25 of communications path and which may use a private network path, an Internet path, or any other suitable path.

- Data for the interactive wagering service may be provided to users of the interactive wagering
30 application via communications path 44j and paths 44f and 44d. Communications path 44j may be provided over a private network, over a public telephone network, over satellite links, or over any other suitable type of links. In one suitable approach, data from paths

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such as path 44j may be routed to paths such as paths 44f and 44d directly by associated television distribution facilities 18. In another suitable approach, the data may be buffered at television distribution facilities 18. Paths 44f and 44d may include coaxial cable, and use of paths 44f and 44d may involve the use of cable modems or the like. If data is provided over path 44j and paths 44f or 44d using an Internet protocol, a web browser or similar software running on user television equipment 22 or user computer equipment 20 may be used to access the data. Such software may be integrated into the interactive wagering application or may be used separately. In another suitable approach, software may be used to view videos and may be used on other platforms, for example, advanced cellular telephones.

The communications paths 44k that are used to connect various other components of interactive wagering system 10 typically do not carry high-bandwidth video signals. Accordingly, paths 44k may be telephone-like paths that are part of the Internet or a private network. Such paths and various other paths 44 may be dedicated connections for security, reliability, and economy.

User telephone equipment 32 may receive information for the interactive wagering service via path 44m. If user telephone equipment 32 is a standard (non-cellular) telephone, such information may be in the form of audio prompts, such "press 1 to place a wager," and audio lottery data, such as "the current jackpot for the New York lottery is five million dollars." Transaction data processing and subscription management system 24 may contain interactive voice response equipment that provides such information to

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the user and that responds to touch-tone signals from the user when the user responds to prompts by pressing buttons on the user's telephone.

If user telephone equipment 32 is a cellular telephone, lottery data and other information for the interactive wagering service may be provided to the user by using a cellular wireless connection as part of path 44m. Users with cellular telephones may be provided with audio prompts using an interactive voice response system located at transaction processing and subscription management system 24 to which the users may respond by pressing cellular telephone buttons to generate touch-tone signals.

Lottery data and other information for the interactive wagering service may be provided to cellular telephones in the form of alphanumeric messages. Such messages may be transmitted to the user by using paging or other alphanumeric messaging formats or any other suitable data communications scheme. In one suitable approach, data may be provided to the cellular telephones over the voice channel and decoded by the cellular telephone using modem circuitry or other suitable circuitry. Data may be provided using any other suitable cellular or wireless path. Regardless of the way in which lottery data and other information for the interactive wagering service are provided to the cellular telephone, such information may be provided to the user by displaying it on the cellular telephone display screen or by presenting it in audible form through the speaker of the cellular telephone.

Lottery data and other interactive wagering service information for the users may be provided in one or more continuous data streams, may be provided

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periodically (e.g., once per hour or once per day), or may be provided using a client-server arrangement in which data is requested by a client processor (e.g., user television equipment 22, user computer

5 equipment 20, user telephone equipment 32, or any other such equipment) from a server (e.g., a server implemented using computer equipment 26 at transaction processing and subscription management system 24 or computer equipment at another suitable location).

10 Videos may be provided using any of these techniques.

A return communications path between the user and the interactive wagering service may be used to allow the user to place wagers and otherwise interact with the interactive wagering service. For example, a
15 user with a standard telephone or a cellular telephone may interact with the interactive wagering service by pressing touch-tone keys on the telephone in response to audio prompts provided by an interactive voice response system at transaction processing and
20 subscription management system 24. In one suitable approach, users may call customer service representatives at customer service facility 36 and place wagers with manual assistance. The user of a cellular telephone may interact with the interactive
25 wagering service by selecting menu options and otherwise interacting with information displayed on the cellular telephone. When a selection is made, software implemented on the telephone may be used to assist the user in transmitting appropriate data, for example,
30 wagering data, to the interactive wagering service.

Such data may be transmitted using any suitable technique. For example, data may be transmitted using a wireless data link that is separate from the cellular voice channels. Data may be transmitted over the voice

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channel, for example, by using a modem built into the cellular telephone, by automatically generating touch-tone signals that may be recognized by the interactive voice response system at transaction processing and subscription management system 24, or using any other suitable arrangement. These approaches may be used even if the user receives lottery data and other information for the interactive wagering service using a platform other than a telephone-based platform.

10 Users with user television equipment 22 may interact with the interactive wagering service by sending data, such as wager data, to transaction processing and subscription management system 24 using path 44i or using paths 44f and 44j. Users with user
15 computer equipment 20 may send data, such as wager data, to transaction processing and subscription management system 24 via path 44h or paths 44d and 44j. Users at any user equipment may send data for the interactive wagering service to locations other than
20 transaction processing and subscription management system 24. For example, the user may provide information directly to customer service facility 36, or any other suitable location.

 In one suitable approach, interactive
25 wagering system 10 may send data to the interactive wagering service at transaction processing and subscription management system 24 using different paths than those used to receive data from transaction processing and subscription management system 24. For
30 example, lottery data may be received at user television equipment 22 via paths 44j and 44f, whereas data may be sent by interactive wagering system 10 from user television equipment 22 to transaction processing and subscription management system 24 using path 44i,

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or any other suitable path. The paths used to receive certain video information may be different from those used to receive lottery data. For example, user television equipment 22 may receive lottery drawing
5 videos using path 44f, but may receive lottery data using path 44i. These examples are merely illustrative. Any suitable combination of paths may be used to distribute lottery data and other information for the interactive wagering service, any suitable
10 combination of paths may be used to receive videos, and any suitable combination of paths may be used to send data to the interactive wagering service.

In one suitable approach, the user may be given the ability to interact with the interactive
15 wagering service using more than one platform. For example, the user may be given the ability to place a wager using a cellular telephone while the user is driving home. When the user arrives home, the user may determine the outcome of the wager by watching a video
20 of the lottery drawing on user television equipment. Later in the day, the interactive wagering application may provide the user with the ability to check the user's account balance using a personal computer. This is merely an illustrative example. The various
25 wagering platforms may be used in any suitable combination.

Interactive wagering system 10 has been described in the context of a system that supports multiple wagering platforms. In another suitable
30 approach, interactive wagering system 10 may support fewer platforms. For example, aspects of the invention may be implemented using an interactive wagering system 10 that only supports cellular telephone wagering or wagering using handheld computer devices.

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In one suitable approach, interactive wagering system 10 may be configured so that it does not support personal computer wagering, wagering with standard telephones, or wagering with user television equipment.

- 5 The system may support cellular telephones and/or handheld computing devices such as personal digital assistants, palm-sized computers, or any other suitable computing device, in combination with any other suitable platform.

- 10 The features of the present invention are sometimes described herein in the context of an interactive wagering application implemented on user television equipment. This is only illustrative. An interactive wagering application implemented on any
- 15 suitable platform (e.g., user computer equipment, user telephone equipment, or any other suitable platform) may be used to provide such features. In computer arrangements, on-screen options may be selected by clicking on them using a mouse pointer or other
- 20 pointing arrangement. In set-top box arrangements, on-screen options may be made larger than they appear in computer-based arrangements to accommodate the greater viewing distance from which televisions are typically operated. Options may be selected by highlighting them
- 25 using remote control arrow keys and by pressing an appropriate key such as an OK or enter or select key. In cellular telephone arrangements and handheld computer arrangements, options and information may be displayed using smaller screens than are typically
- 30 available on personal computer or set-top box arrangements. To accommodate the smaller screen size, options that might otherwise be presented on a single screen may be displayed using multiple screens or layered menus. Options may be selected by highlighting

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them using navigation keys and pressing an appropriate select button on the cellular telephone or handheld computing device or by using a pen-based interface or the like.

5 The interactive wagering application may be implemented using application software that runs primarily on user television equipment, user computer equipment, user telephone equipment, or other local platform or using a remote server or other computer
10 that is accessed from the local platform. Arrangements in which interactive wagering services are implemented using software on remote computers that is accessed on-demand from local platforms may be referred to as client-server arrangements. Such client-server
15 arrangements may be used to allow client processes on set-top boxes or other platforms to access server processes running on servers located at cable system headends or other television distribution facilities 18, as shown in FIG. 1. Regardless of the
20 type of system architecture or platform used, the software that supports the interactive wagering service features described herein may be referred to as an interactive wagering application.

 In a set-top box environment, the interactive
25 wagering system may allow the user to launch the interactive wagering application by selecting a menu option in an interactive television program guide or other set-top box application or menu. In one suitable approach, the interactive wagering application may be
30 launched automatically whenever the user tunes to a particular channel, for example, the wagering-related television channel. After the user has tuned to this channel, the interactive wagering system may display an interactive icon on the user's television screen that

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indicates that the interactive wagering application is available. If the user presses an "OK" remote control key, the interactive wagering system may launch the interactive wagering application.

5 In a computer-based system, the user may access the interactive wagering application by browsing to an Internet web site or a site on a private network.

Interactive wagering systems based on cellular telephones or the like may be launched by
10 selecting an appropriate on-screen menu option presented on the display of the cellular telephone.

Interactive wagering system 10 is shown to be compatible with various forms of user equipment (e.g., computers, telephones, television equipment, etc.).
15 For purposes of brevity and clarity, and not by way of limitation, the interactive wagering application of the present invention is primarily described herein in conjunction with the use of user television equipment 22. It should be understood that this is
20 merely an illustrative embodiment of the present invention, and that any other suitable user equipment or combination of user equipment may be used.

The interactive wagering application of the present invention, when implemented on user television
25 equipment, may be incorporated into an interactive television application, such as a program guide. Such an interactive television application is described in Ellis et al. U.S. patent application No. 09/346,134, filed July 16, 1999, which is hereby incorporated by
30 reference herein in its entirety. It should be understood that the features of the interactive wagering application, as described herein, may be performed by the interactive television application. For example, in one suitable approach, the interactive

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wagering application may be used to display display screens. In another suitable approach, the interactive television application may be responsible for displaying display screens. For purposes of brevity and clarity, and not by way of limitation, the present invention is primarily described herein as using the interactive wagering application to perform all of the functions of the present invention.

The interactive wagering application of the present invention may provide a user with an interface having suitable display screens that may be used by the user to participate in any suitable and legal form of lottery. For example, the interactive wagering application may provide the user with the ability to participate in states lotteries, federal lotteries, keno, municipal lotteries, or any other suitable and legal form of lottery.

FIG. 7 shows an illustrative display screen 101 that may be displayed by the interactive wagering application that may allow the user to select any available lottery 105. Lotteries 105 may include any suitable and legal lottery in which the user may participate. The list of lotteries 105 may, for example, be partly based on the user's location. For example, if a particular state lottery (in the case of the United States) is only allowed to be played within the state with which the lottery is associated, then only users who are using user television equipment within that state may be provided with the ability to select that particular lottery. Municipal lotteries may, likewise, be limited to their associated municipalities. National lotteries may be available for selection by anyone in the associated nation. If the law allows, national, state, and municipal

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lotteries may be played internationally, between different states, and between different municipalities, respectively.

Display screen 101 may also provide the user with proprietary lottery selections, such as a casino's or a hotel's proprietary keno game. For example, user television equipment 22 may be in a hotel room where the user may access the hotel's keno games, or any other suitable lotteries, via the interactive wagering application. Any such proprietary lottery may be offered to the user.

To select a lottery 105, the user may use a remote control or any other suitable device to move a highlight region 103 over a lottery 105 in which the user wishes to participate. Once highlight region 105 is over the desired lottery, the user may press a "select" button, or any other suitable button, on the remote control. This is merely an illustrative way in which the user may select a lottery 105. Any other suitable way may be used.

Display screen 101 is merely an illustrative arrangement of elements that may be displayed to the user for lottery selection. Any other suitable arrangement may be used. In one suitable approach, other suitable options and features may be integrated into display screen 101.

FIG. 8 shows an illustrative display screen 111 that may be displayed by the interactive wagering application to provide the user with the ability to play a particular lottery 115. The interactive wagering application may provide number selection region 113 to allow the user to select which numbers to play for lottery 115. Lottery selection region 113 may be customized by the interactive

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wagering application for each particular lottery 115. For example, if a particular lottery has a choice of numbers from "1" to "25," then the interactive wagering application may display numbers "1" to "25" in number
5 selection region 113.

Number chosen region 117 may be displayed in display screen 111. Number chosen region 117 may indicate to the user the currently selected numbers to be played in lottery 115. The interactive wagering
10 application may limit the number of numbers that are chosen by the user (i.e., displayed in number chosen region 117) based on the number of numbers that are required to be chosen for lottery 115. In one suitable approach, the interactive wagering application may take
15 into account that fact that some lotteries (e.g., keno) may have a variable number of numbers that may be chosen by the user.

When lottery 115 is offered more than one time, such as on a periodic basis, date entry
20 region 119 may be displayed to the user. Date entry region 119 may provide the user with the ability to choose one or more dates to play lottery 115. The interactive wagering application may limit the user to choosing only dates on which lottery 115 is offered.

25 Display screen 111 is merely illustrative. Any other suitable customized arrangement may be used. For example, if a particular lottery requires certain additional information (e.g., supplemental numbers, letters, words, times, etc.) then the interactive
30 wagering application may provide the user with the ability to enter the additional information. In one suitable approach, the interactive wagering application may require the user to enter all essential information

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before the interactive wagering application processes the bet.

FIG. 9 is a flow chart of illustrative steps involved in providing the user with the ability to play a lottery. At step 130 the user may select to play a particular lottery, by, for example, selecting a lottery from the list of lotteries 105 of FIG. 7. At step 132, the interactive wagering application may provide to the user a customized interface for the particular lottery the user selected to play. The customized interface, such as display screen 111 of FIG. 8, may allow the user to choose parameters (e.g., numbers to play) for the selected lottery. This is a generalized flow chart. Any other suitable steps may be taken in addition to those illustrated.

In one suitable embodiment of the interactive wagering application of the present invention, the interactive wagering application may provide the user with the ability to specify a default set of numbers for particular lotteries. For example, for a four-number lottery, the user may save four suitable numbers that may be used by the interactive wagering application as the default numbers to play for that particular lottery. In one suitable approach, the interactive wagering application may automatically participate in the lottery, on the user's behalf, every time that lottery is offered. The interactive wagering application may use the default numbers that the user previously specified.

FIG. 10 is a flow chart of illustrative steps involved in allowing the user to automatically participate in a lottery using default numbers. At step 140, the interactive wagering application may provide the user with the ability to set default

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numbers (and any other required information) for a particular lottery. At step 142, the interactive wagering application automatically enters the lottery, on behalf of the user, using the default numbers chosen
5 by the user at step 140. In one suitable approach, the interactive wagering application may enter the lottery, on behalf of the user, every time the lottery is offered (step 144). In another suitable approach, the user may be given the ability to specify whether to
10 participate in the lottery more than once or when to participate in the lottery using the default numbers.

In another suitable approach, the interactive wagering application may provide the user with the ability to use a random number generator to produce the
15 numbers to be played for a particular lottery. In another suitable approach, the default numbers may be determined using a random number generator. Any such suitable use of randomness may be used.

In another suitable embodiment of the
20 interactive wagering application of the present invention, the interactive wagering application may provide the user with the ability to set conditions on whether to play a lottery. Any suitable conditions may be set by the user. For example, suitable conditions
25 may include the amount of or type of lottery prize, a certain amount of time having passed since last participating in a lottery, odds of winning, or any other suitable conditions.

FIG. 11 is a flow chart of illustrative steps
30 involved in allowing the user to participate in lotteries based on conditions that the user may set. At step 150, the interactive wagering application may provide the user with the ability to set conditions that are to be used by the interactive wagering

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application to determine whether to participate in a lottery on behalf of the user. At step 152, the user may select and set conditions to be used. At step 154 the interactive wagering application may automatically
5 participate in a lottery if all of the user's specified conditions are met.

In one suitable embodiment of the interactive wagering application of the present invention, the interactive wagering application may allow the user to
10 create a lottery bet, but before the lottery bet is entered, the user may need to finalize or confirm the bet. Referring back to FIG. 8, the user may finalize the lottery at the time of creating the bet, such as by selecting finalize now option 126. Alternatively, the
15 user may create a bet, but choose to finalize it later, such as by selecting finalize later option 128. When the bet is created, it may be stored in any suitable location using interactive wagering system 10. When the bet is finalized, the user's account may be debited
20 for the appropriate amount of money for participating in that particular lottery.

In one suitable approach, when the user creates a bet, but does not finalize the bet, the interactive wagering application may remind the user of
25 the unfinalized bet at any suitable time before the time of the lottery. The reminder may take any suitable form. For example, the reminder may be an overlay window that may pop up on the user's display when the user is watching a television program, or when
30 the user is otherwise using the features of the interactive television application or the interactive wagering application. The reminder may be in any other suitable form, such as an icon that may be part of an on-screen interface, an e-mail message, an instant

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message, a telephone message, a beeper page, or any other suitable form of a reminder.

FIG. 12 shows an illustrative display screen 160 on which a reminder pop-up overlay window 162 is displayed. Pop-up overlay window may include any suitable reminder, such as a reminder to finalize a lottery bet. This is merely an illustrative way in which to use a pop-up overlay window to provide the user with a reminder. Any other suitable use of an overlay may be implemented. Any other suitable reminder may be used.

FIG. 13 is a flow chart of illustrative steps involved in finalizing a lottery bet. At step 170, a user may create a lottery bet. In response thereto, the interactive wagering application may provide the user with the ability to finalize the lottery bet at step 172. If the user finalized the lottery bet at step 174, then at step 176, the interactive wagering application may debit the user's account and may enter the user into the lottery drawing. If the user does not finalize the lottery bet at step 178, then at step 180 the interactive wagering application may provide the user with a reminder to finalize at some suitable point prior to the lottery drawing. If the user finalizes the lottery at this point, then step 176 may be performed. If the user never finalizes the lottery bet, and the lottery drawing takes place, the lottery bet may be deleted, ignored, or both.

The interactive wagering application may also provide the user with the ability to make any desired changes to the bet before the bet is finalized.

The interactive wagering application of the present invention may provide the user with the ability to view any available lottery drawing. For example,

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the user may view lottery drawings in which the user is participating. Referring back to FIG. 8, the interactive television application may provide the user with the ability to remind the user about an upcoming
5 lottery drawing, using, for example, remind option 122. The reminder may take any suitable form. For example, the reminder may take any of the forms previously mentioned for finalization reminders. The reminder may provide the user with a link to the television channel
10 on which the lottery drawing will be taking place.

In another suitable approach, the interactive wagering application may provide the user with the ability to schedule a recording of the lottery drawing, using, for example, record option 124. If the user
15 chooses to record the lottery drawing, then the lottery drawing, assuming it is broadcasted, may be recorded using any suitable recording technique. For example, the lottery drawing may be recorded using a videocassette recorder, a digital television recorder,
20 a personal computer having sufficient storage space, or any other suitable recording device.

After a lottery drawing has taken place, the interactive wagering application may provide the user with the ability to view the results of the lottery
25 drawing. For example, the user may access a list of all lottery drawings that have taken place for a particular period of time. This list may be similar in nature to the list of lotteries 105 of FIG. 7. The user may select any past lottery to view the results of
30 the lottery. If the user participated in the lottery, then the results may also indicate to the user whether the user has won any prize. If the user has won something, then the winnings may be described (e.g., amount of money, description of prize, etc.).

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FIG. 14A shows an illustrative display screen 190 including results 194 for a particular lottery 192 in which the user participated. A message 196 may be generated by the interactive
5 wagering application to indicate to the user that the user did not win any prize. The user may also be shown numbers 198 that were played in lottery 192 on the user's behalf. FIG. 14B shows another illustrative display screen 200 including results 204 for a
10 particular lottery 202 in which the user participated. A message 206 may be generated by the interactive wagering application to indicate to the user that the user matched enough numbers to win a prize of \$100. The user may also be shown numbers 208 that were played
15 in lottery 202 on the user's behalf.

Display screens 190 and 200 are merely illustrative. Any other suitable arrangement may be used to indicate to the user the results of a lottery. For example, if the user accesses the results of a
20 lottery in which the user did not participate, then information, such as message 196 and numbers played 198, may not be displayed.

In another suitable approach, the user may be notified of lottery results via any suitable
25 notification. For example, the result may be displayed in a pop-up overlay at the conclusion of the lottery drawing in a manner similar to the way reminder 162 is presented in FIG. 7. Results may also be sent to the user via an e-mail, via a telephone (e.g., a cellular
30 telephone with Internet functionality, voice mail, etc.), via a pager, via an instant message, or via any other suitable communication technique.

The interactive wagering application may provide the user with the ability to determine how the

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user is to receive lottery results. FIG. 15 shows an illustrative display screen 210 that may provide the user with notification options 212.

In one suitable embodiment of the present invention, the interactive wagering application may provide the user with the ability to purchase lottery gift certificates for other people. Referring back to FIG. 8, the user may use gift certificate option 120 to purchase a lottery gift certificate for another person.

10 In one suitable approach, the lottery gift certificate may be an electronic lottery ticket for which the user has selected the numbers. In another suitable approach, the lottery gift certificate may be an electronic voucher with which the recipient of the gift

15 certificate may participate in any available lottery (i.e., assuming the amount of the gift certificate is enough to cover the participation cost).

If the recipient of the gift certificate is not a user of system 10, the interactive wagering

20 application, or both, then the recipient may be notified of his or her gift via any suitable communication. For example, the recipient may be notified via an e-mail, via a cellular telephone (e.g., with Internet functionality), via a pager, via an

25 instant message, or via any other suitable communication technique. The recipient may also be notified automatically of the result of the lottery via any of these communication techniques.

If the recipient of the gift certificate is a

30 user of system 10, the interactive wagering application, or both, then in addition to the communication techniques just mentioned, the recipient may also receive a notification via, for example, a

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pop-up overlay or any other suitable on-screen indicator.

Thus, systems and methods for presenting a lottery interface in an interactive wagering application are provided. One skilled in the art will realize that the present invention can be practiced by other than the described embodiments, which are presented for purposes of illustration and not of limitation, and that the present invention is limited only by the claims which follow.

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What is Claimed is:

1. A method for using an interactive wagering application to allow a user to participate in lottery wagering using user equipment, comprising:
providing a listing of lotteries in which the user can participate on a display; and
giving the user the ability to participate in at least one of the lotteries using the user equipment.
2. The method of claim 1 further comprising notifying the user that results to at least one of the lotteries in which the user participated are available.
3. The method of claim 2 wherein the notification is selected from a group consisting of a pop-up overlay, an icon, an e-mail, an instant message, a pager message, a telephone message, and any combination thereof.
4. The method of claim 1 further comprising displaying the results to at least one of the lotteries in which the user participated.
5. The method of claim 4 further comprising indicating whether the user won for each of the lotteries for which results are displayed.
6. The method of claim 1 further comprising recording the lottery drawings associated with the lotteries in which the user participated.
7. The method of claim 1 further comprising reminding the user of an upcoming lottery drawing

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associated with at least one of the lotteries in which the user participated.

8. The method of claim 1 further comprising giving the user the ability to generate a lottery gift certificate.

9. The method of claim 1 further comprising displaying a user interface to the user to use in creating a wager for at least one of the lotteries, wherein the user interface is customized for each one of the lotteries.

10. The method of claim 1 further comprising:

creating a wager based on user inputs;
giving the user the ability to finalize the wager at a later time; and
reminding the user to finalize the wager.

11. An interactive wagering system for using an interactive wagering application to allow a user to participate in lottery wagering using user television equipment, comprising user equipment configured to:

provide a listing of lotteries in which the user can participate on a display; and
give the user the ability to participate in at least one of the lotteries using the user television equipment.

12. The system of claim 11 further comprising user equipment configured to notify the user

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that results to at least one of the lotteries in which the user participated are available.

13. The system of claim 12 wherein the notification is selected from a group consisting of a pop-up overlay, an icon, an e-mail, an instant message, a pager message, a telephone message, and any combination thereof.

14. The system of claim 11 further comprising user equipment configured to display the results to at least one of the lotteries in which the user participated.

15. The system of claim 14 further comprising user equipment configured to indicate whether the user won for each of the lotteries for which results are displayed.

16. The system of claim 11 further comprising user equipment configured to record the lottery drawings associated with the lotteries in which the user participated.

17. The system of claim 11 further comprising user equipment configured to remind the user of an upcoming lottery drawing associated with at least one of the lotteries in which the user participated.

18. The system of claim 11 further comprising user equipment configured to give the user the ability to generate a lottery gift certificate.

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19. The system of claim 11 further comprising user equipment configured to display a user interface to the user to use in creating a wager for at least one of the lotteries, wherein the user interface is customized for each one of the lotteries.

20. The system of claim 11 further comprising user equipment configured to:
create a wager based on user inputs;
give the user the ability to finalize the wager at a later time; and
remind the user to finalize the wager.

21. A method for using an interactive wagering application to allow a user to participate in a lottery automatically using user equipment, comprising:
giving the user the ability to set conditions; and
automatically participating in the lottery on behalf of the user when the conditions have been met.

22. The method of claim 21 wherein automatically participating in the lottery comprises using a default set of lottery numbers.

23. The method of claim 22 wherein the default set of lottery numbers are user-specified.

24. The method of claim 21 wherein automatically participating in the lottery comprises using a set of randomly generated lottery numbers.

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25. The method of claim 21 wherein the conditions are based on factors selected from the group consisting of a period of time from the last time the user participated in the lottery, the lottery prize, odds of winning, and any combination thereof.

26. The method of claim 21 further comprising automatically participating in the lottery on behalf of the user every time the lottery is offered.

27. A system for using an interactive wagering application to allow a user to participate in a lottery automatically comprising user equipment configured to:

give the user the ability to set conditions; and

automatically participate in the lottery on behalf of the user when the conditions have been met.

28. The system of claim 27 further comprising user equipment configured to use a default set of lottery numbers when automatically participating in the lottery.

29. The system of claim 28 wherein the default set of lottery numbers are user-specified.

30. The system of claim 27 further comprising user equipment configured to use a set of randomly generated lottery numbers when automatically participating in the lottery.

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31. The system of claim 27 wherein the conditions are based on factors selected from the group consisting of a period of time from the last time the user participated in the lottery, the lottery prize, odds of winning, and any combination thereof.

32. The system of claim 27 further comprising user equipment configured to automatically participate in the lottery on behalf of the user every time the lottery is offered.

10

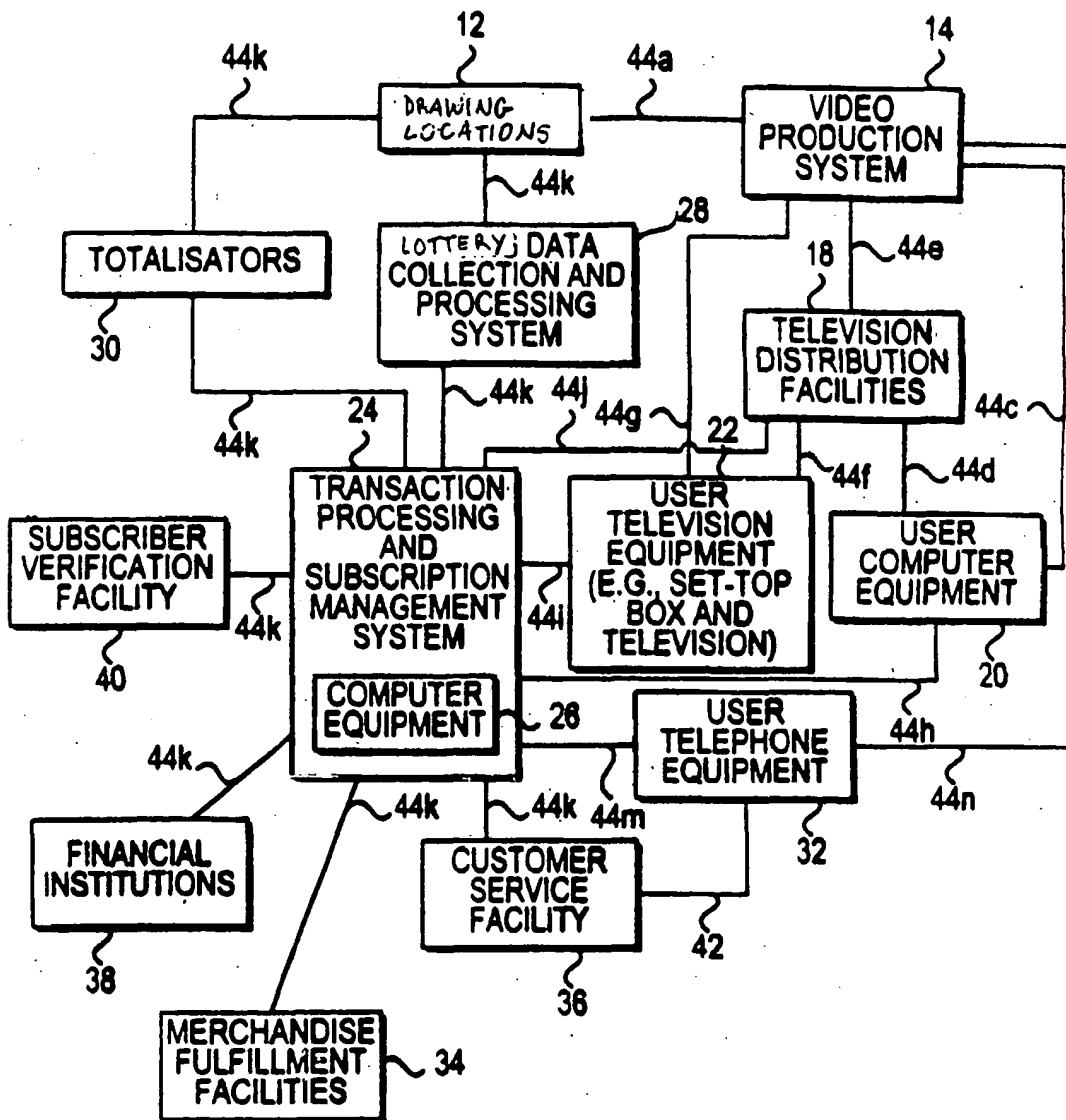
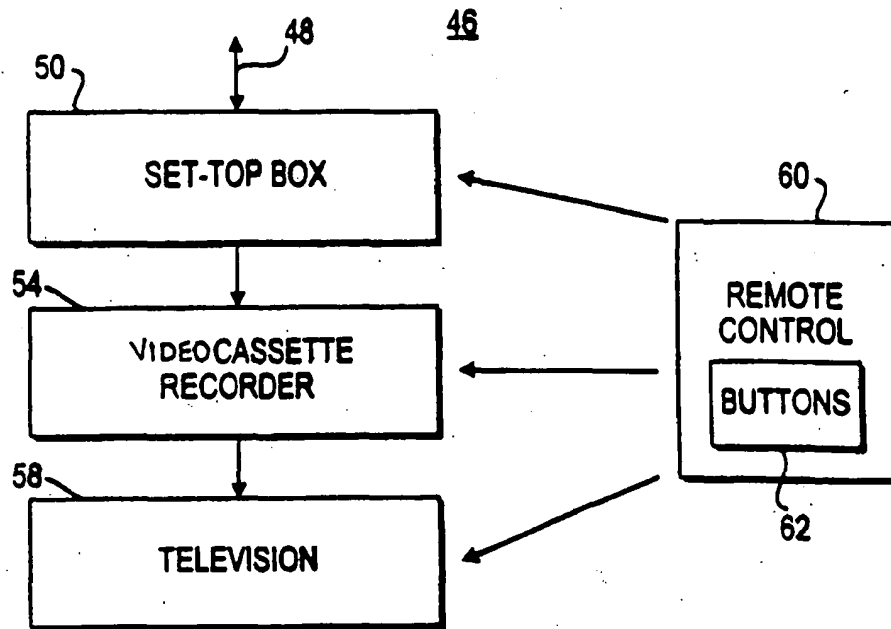
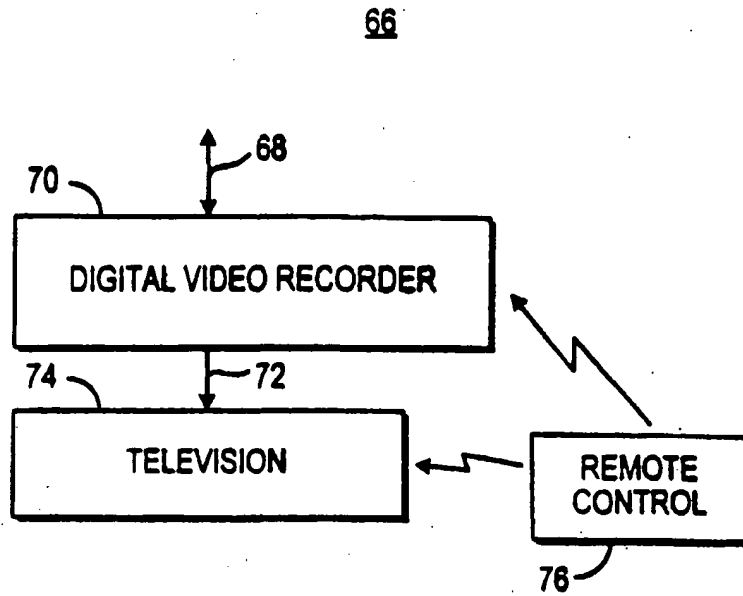
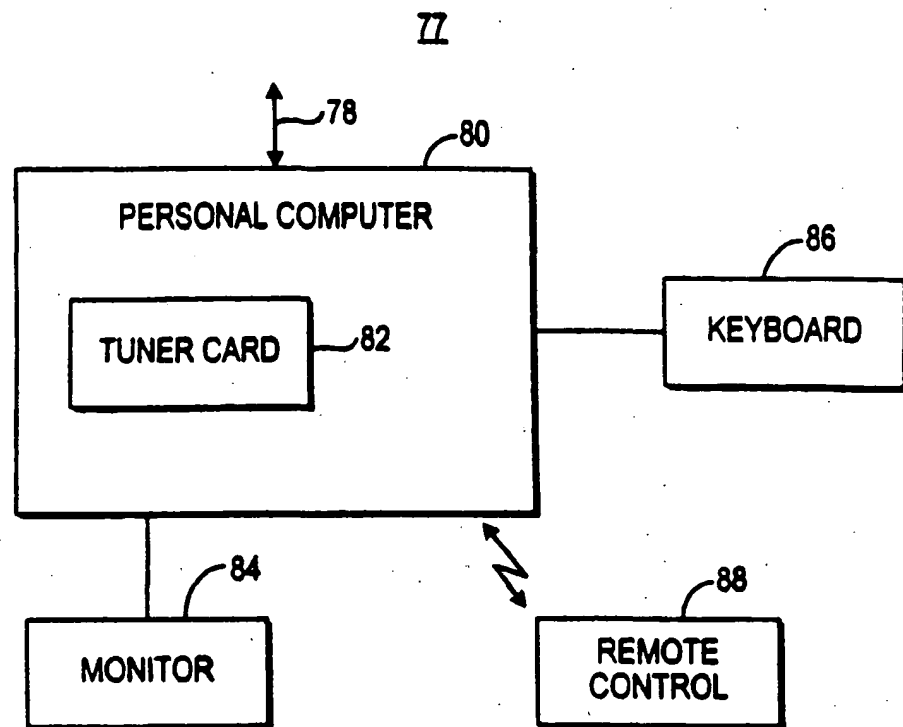
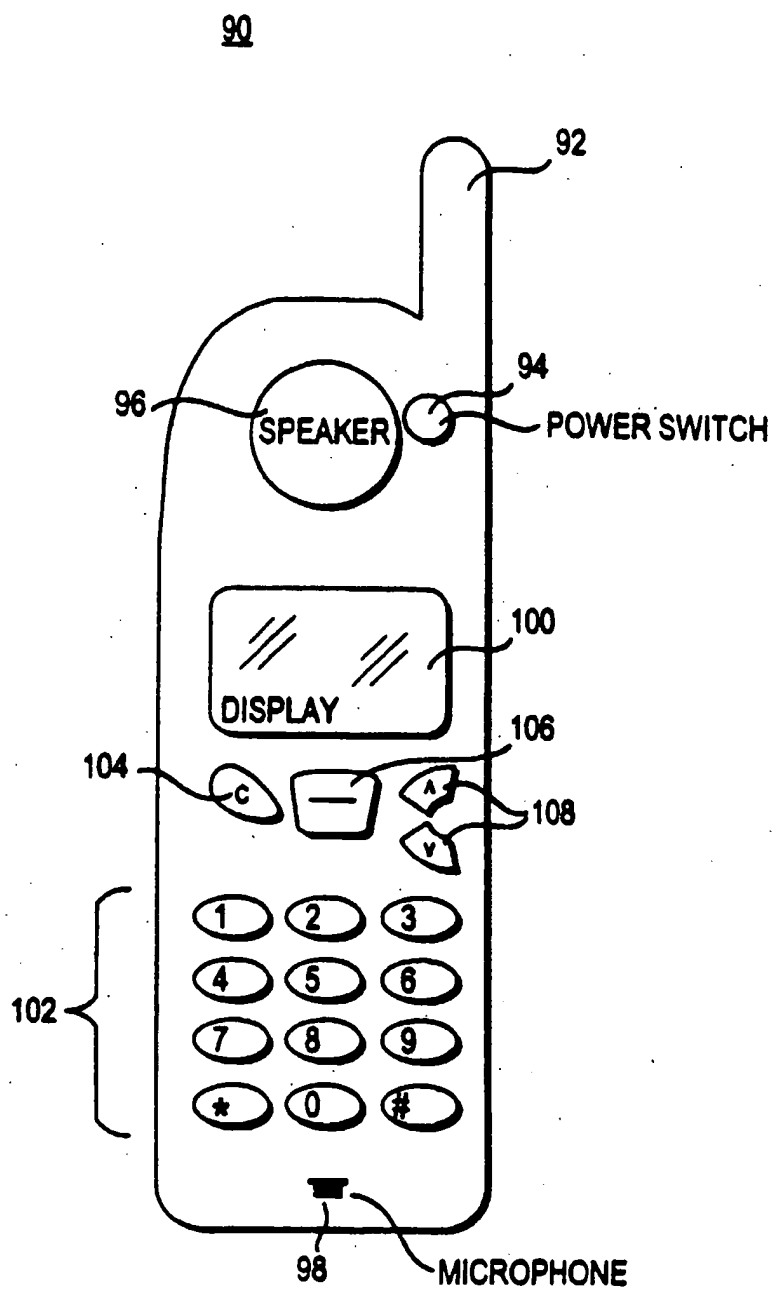


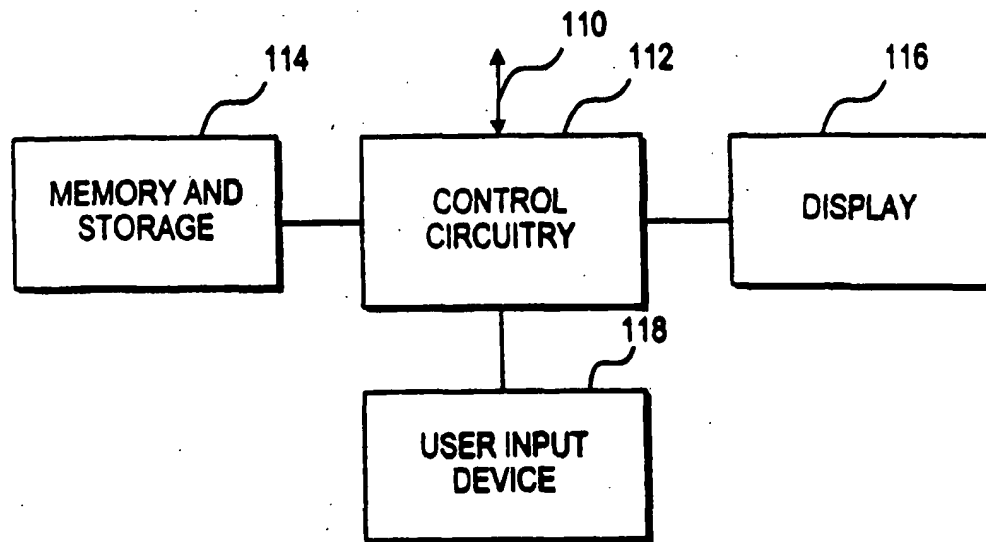
FIG. 1

**FIG. 2**

**FIG. 3**

**FIG. 4**

**FIG. 5**

**FIG. 6**

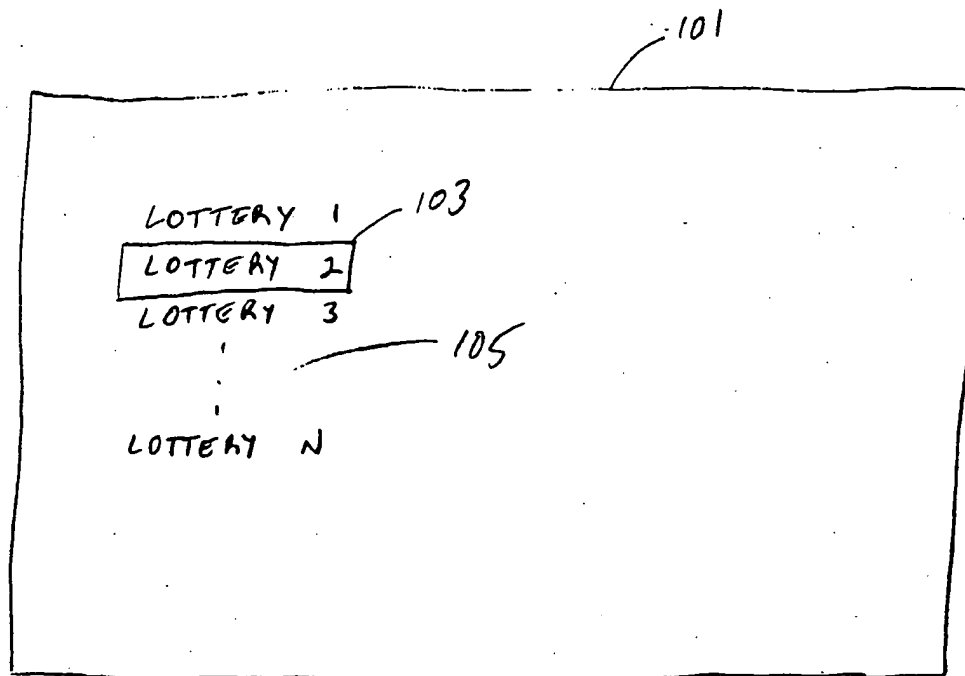


FIG. 7

111

115

113

PLAY LOTTERY 2

117

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25

☐ 3 ☐ 9 ☐ 19 ☐

☐ ☐

☒ THIS IS A GIFT FOR: 120

JOHN SMITH JS@DOT.COM

REHIND ☒ 122

RECORD ☐ 124

NOVEMBER 16, 2000 119

FINALIZE NOW 126

FINALIZE LATER 128

FIG. 8

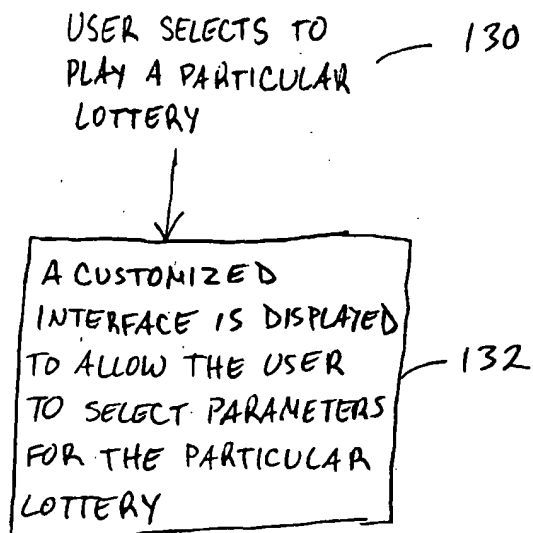


FIG. 9

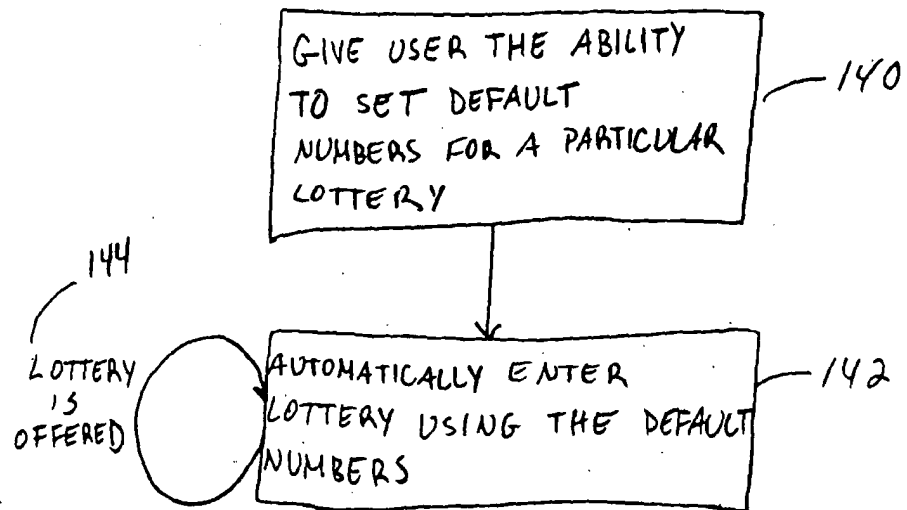


FIG. 10

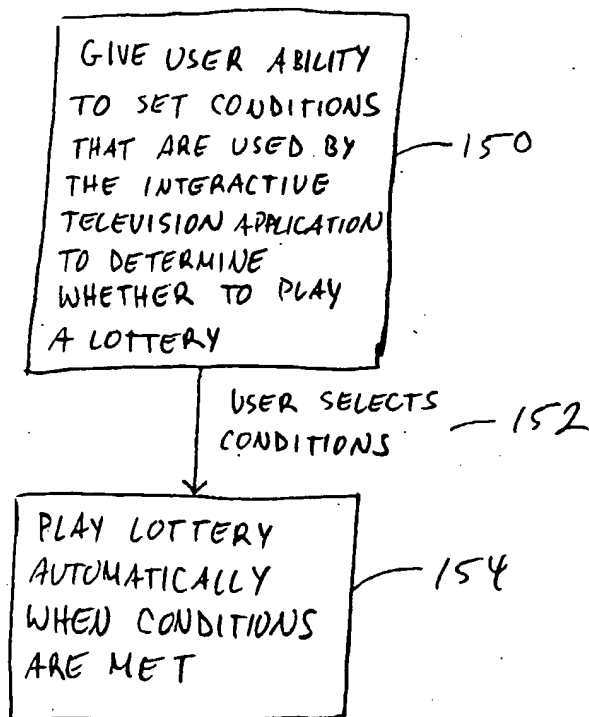


FIG. 11

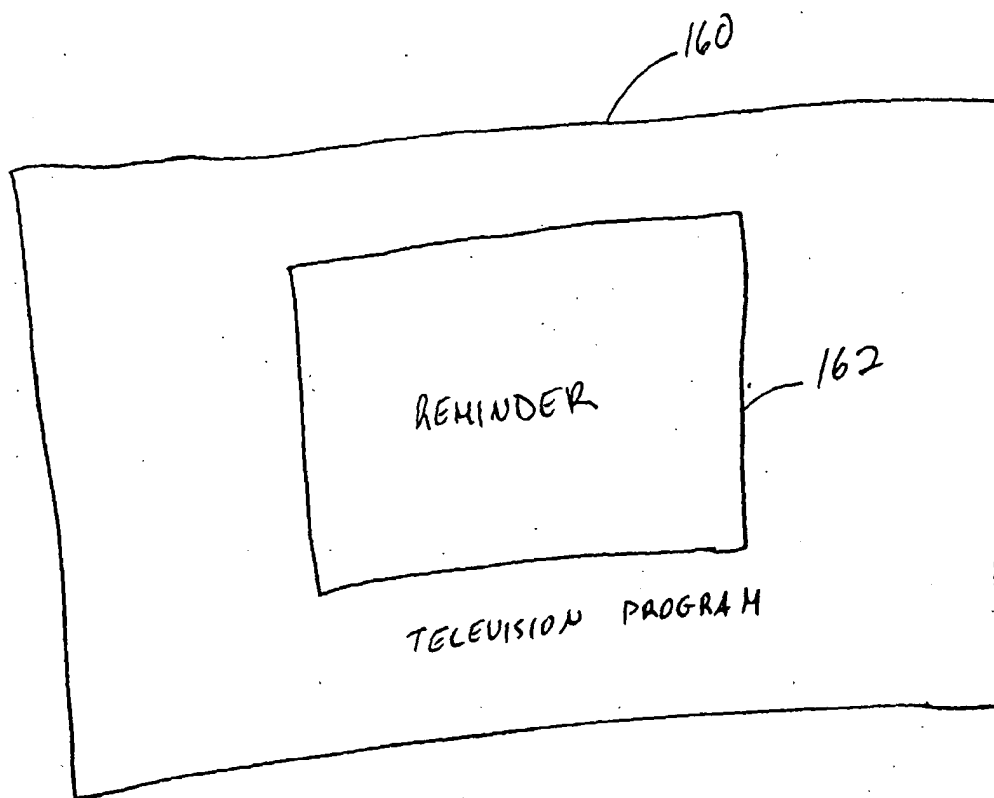


FIG. 12

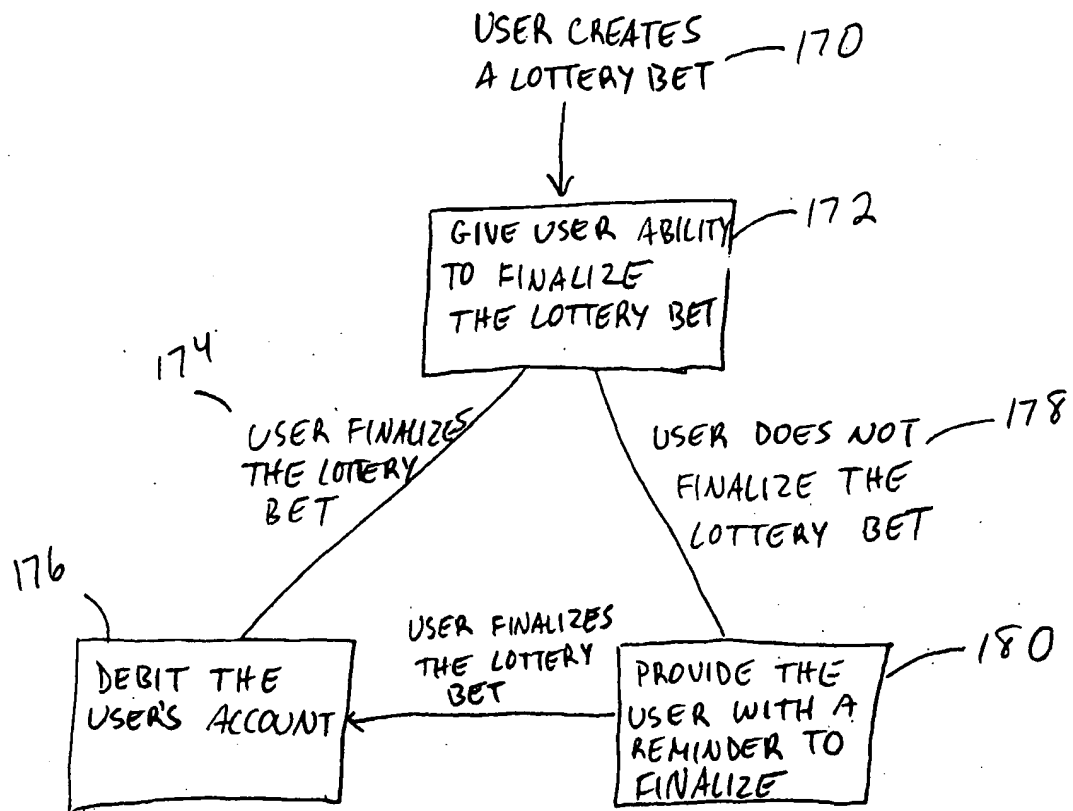


FIG. 13

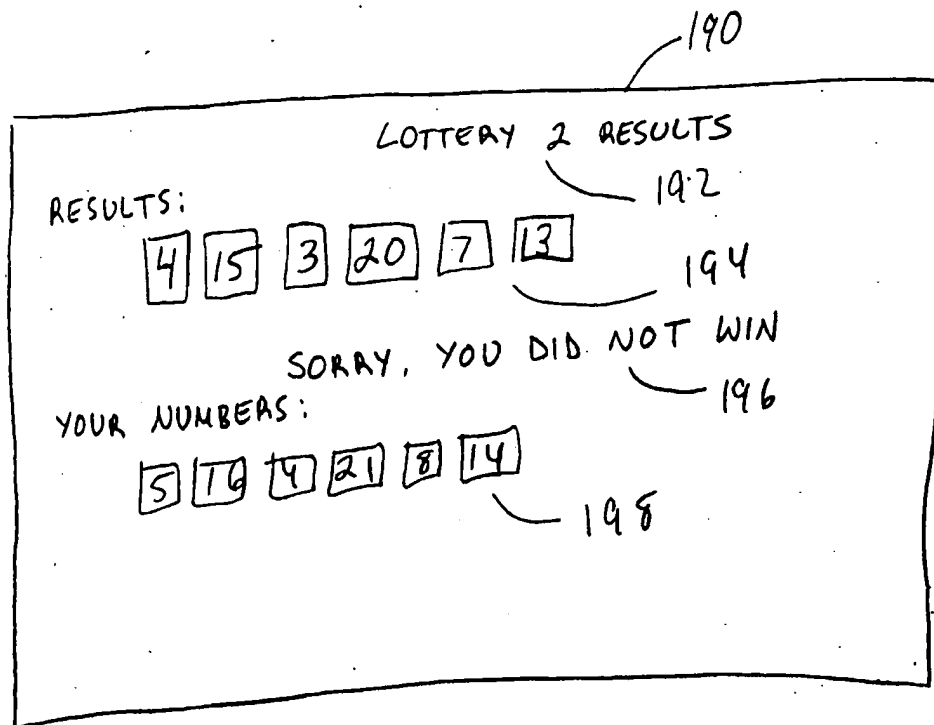


FIG. 14A

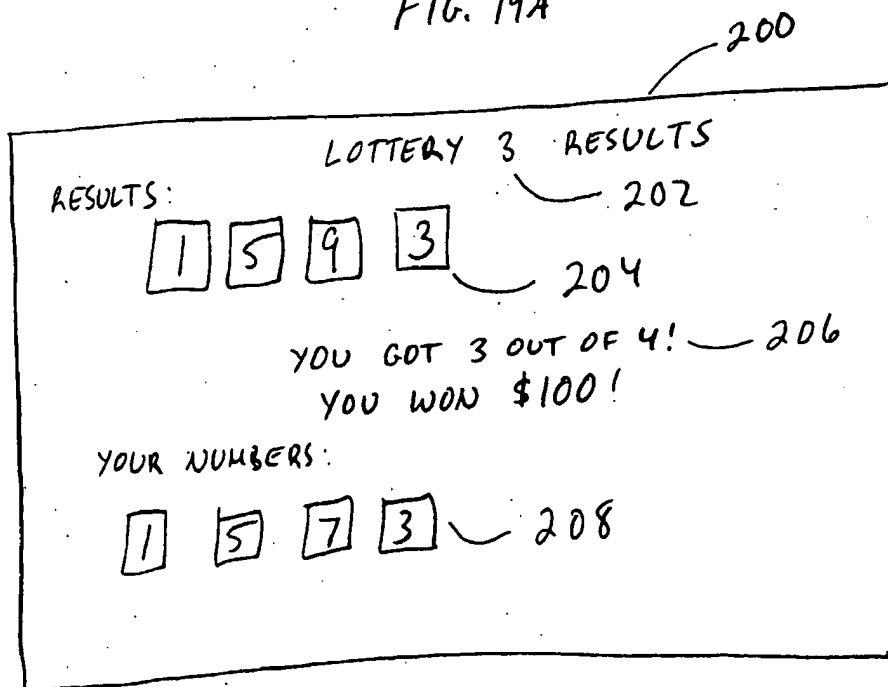


FIG. 14B

210

NOTIFICATION OPTIONS

- ☒ EMAIL
- ☐ TELEPHONE
- ☒ OVERLAY MESSAGE — 212
- ☐ PAGER
- ☐ INSTANT MESSAGE

FIG. 15



Patent US240D1
Attorney Docket: 443,773-51

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

RANDALL M. KATZ, et al.

Serial No.: 12/886,429

Filed: September 20, 2010

For: APPARATUS, SYTEMS AND
METHODS FOR IMPLEMENTING
ENHANCED GAMING AND PRIZING
PARAMETERS IN AN ELECTRONIC
ENVIRONMENT

Group Art Unit 3714

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with 37 CFR §§ 1.97 and 1.98, the items identified in this Information Disclosure Statement ("IDS") are brought to the attention of the Office. The accompanying Form PTO/SB/08a provides a listing of documents that may be relevant to the subject application.

The items identified in this IDS may or may not be "material" pursuant to 37 CFR § 1.56. The submission thereof by Applicant is not to be construed as an admission that any such patent, publication or other information referred to therein is material or considered to be material (37 CFR § 1.97(h)), or even qualifies as "prior art" under 35 USC § 102 with respect to this invention unless specifically designated by Applicant as such.

CERTIFICATE OF MAILING

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the U.S. Postal Service, first class mail, addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below

11-19-10
Date of Deposit
NBI:805532.1

Saundra Carr
Saundra Carr

INFORMATION DISCLOSURE STATEMENT FILING PROVISION:

☒ This IDS is believed to be timely in that it is being submitted under 37 CFR § 1.97(b), that is (1) within three months of the filing date of the application, which is not a continued prosecution application filed under § 1.53(d); or (2) within three months of entry of the national stage as set forth in 37 CFR § 1.491; or (3) before the mailing of a first Office action on the merits; or (4) before the mailing of a first Office action after filing a request for continued examination under § 1.114. Thus, no fee is required.

☒ However, if the undersigned is in error in this regard, Applicant respectfully requests that the Office consider this IDS as filed under 37 CFR § 1.97(c), if applicable, and charge the fee due under 37 CFR § 1.17(p) to the deposit account referenced below.

☒ However, if the undersigned is in error in this regard, Applicant respectfully requests that the Office consider this IDS as filed under 37 CFR § 1.97(c), if applicable, and a statement under 37 CFR § 1.97(e) is included below, thus no fee is required.

☐ This IDS is being submitted under 37 CFR § 1.97(c), that is after mailing of a first Office action on the merits, but before a Final Action under 37 CFR § 1.113 or a Notice of Allowance under 37 CFR § 1.311.

☐ The fee due under 37 CFR § 1.17(p) is submitted herewith.

☐ A statement under 37 CFR § 1.97(e) is included below, thus no fee is required. In the event that this IDS is not received before a Final Action or a Notice of Allowance, then Applicant respectfully requests that the Office consider the filing of these papers to be submitted under 37 CFR § 1.97(d) and charge the fee due under 37 CFR § 1.17(p) to the deposit account below.

☐ This IDS is being submitted under 37 CFR § 1.97(d), that is after a Final Action under 37 CFR § 1.113 or a Notice of Allowance under 37 CFR § 1.311, but before payment of the issue fee. A statement under 37 CFR § 1.97(e) is included below. The fee due under 37 CFR § 1.17(p) is submitted herewith.

Statement Under 37 CFR § 1.97(e):

☐ Each item contained in this IDS was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS.

☐ No item contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this statement after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 CFR § 1.56(c) more than three months prior to the filing of this IDS.

PAYMENT AND/OR AUTHORIZATION TO CHARGE FEES:

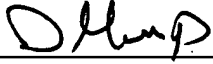
- ☐ A check in the amount of \$180.00 is enclosed for the above fee(s).
☐ Please charge \$180.00 to Deposit Account No. 50-2862 for the above fee(s).

The Commissioner is authorized to charge any fees required by the filing of these papers, and to credit any overpayment to O'Melveny & Myers' Deposit Account No. 50-2862.

Respectfully submitted,

O'MELVENY & MYERS LLP

Dated: 11/18/10

By: 

David B. Murphy
Reg. No. 31,125
Attorneys for Applicant

DBM/sc

34263

PATENT TRADEMARK OFFICE

Applicant: RANDALL KATZ et al.

Attorney: DMurphy

Serial No.: 12/886,429

Docket No.: 443,773-051

For: Apparatus, Systems and Methods for Implementing Enhanced Gaming and
Prizing Parameters in an Electronic Environment

Please acknowledge receipt of the following by affixing hereon the Patent
and Trademark Office date stamp and returning this card to our office.

Enclosures:

1. Information Disclosure Statement (3 pages)
2. PTOSB/08A (4 pages)
3. References Cited on PTOSB/08A that are NPL Docs
4. Return postcard

Date of Deposit: November 19, 2010

NB1:807955.1



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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/886,429	09/20/2010	Randall M. Katz	443,773-051 (240D1)

CONFIRMATION NO. 1557

IMPROPER CPOA LETTER

34263
O'Melveny & Myers LLP
IP&T Calendar Department LA-13-A7
400 South Hope Street
Los Angeles, CA 90071-2899



Date Mailed: 10/08/2010

NOTICE REGARDING POWER OF ATTORNEY

This is in response to the Power of Attorney filed 09/20/2010. The Power of Attorney in this application is not accepted for the reason(s) listed below:

- The Power of Attorney is from an assignee and the Certificate required by 37 CFR 3.73(b) has not been received.

/rsantos/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101



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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
12/886,429	09/20/2010	3714	572	443,773-051 (240D1)	16	4

CONFIRMATION NO. 1557

34263

O'Melveny & Myers LLP
IP&T Calendar Department LA-13-A7
400 South Hope Street
Los Angeles, CA 90071-2899

FILING RECEIPT



OC00000043871527

Date Mailed: 10/08/2010

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Applicant(s)

Randall M. Katz, Beverly Hills, CA;
Gary Dawson, West Lake Village, CA;

Power of Attorney: None

Domestic Priority data as claimed by applicant

This application is a DIV of 10/654,585 09/02/2003 PAT 7,798,896
which is a CIP of 10/123,861 04/15/2002
which is a CIP of 09/965,620 09/26/2001 PAT 6,811,484
which is a CIP of 09/672,179 09/27/2000 PAT 6,488,280

Foreign Applications

If Required, Foreign Filing License Granted: 10/05/2010

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 12/886,429**

Projected Publication Date: 01/13/2011

Non-Publication Request: No

Early Publication Request: No

** SMALL ENTITY **

Title

APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT

Preliminary Class

463

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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NOT GRANTED

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICETransmitted VIA EFS WEB TRANSMISSION on SEPTEMBER 20, 2010**UTILITY PATENT APPLICATION TRANSMITTAL**

Enclosed herewith for filing under 37 CFR 1.53(b) is a

☐ Continuation☒ Divisional☐ Continuation-in-Part (CIP)of pending prior U.S. Application S.N. 10/654,585, filed September 2, 2003, as follows:Inventor: **Randall M. Katz and Gary Dawson**Title: **APPARATUS, SYSTEMS, AND METHODS FOR IMPLEMENTING ENHANCED GAMING AND PRIZING PARAMETERS IN AN ELECTRONIC ENVIRONMENT****APPLICATION ELEMENTS ENCLOSED**

<u>67</u>	Page(s) Specification	<u>2</u>	Page(s) Declaration ☒ from Parent
<u>3</u>	Page(s) Claims	<u>1</u>	Page(s) Power Attorney ☒ from Parent
<u>1</u>	Page(s) of Abstract	<u>1</u>	Page(s) Change of Address
<u>25</u>	Sheet(s) drawings :	☒ Formal ☐ Informal	

ACCOMPANYING APPLICATION PARTS

_____ Page(s) PTO Letter and Petition for Extension of Time for Parent

_____ Page(s) Preliminary Amendment

FEE CALCULATION☒ Applicant claims small entity status under 37 CFR 1.27

BASIC FILING FEE	SEARCH FEES	EXAMINATION FEES	TOTAL
\$330/\$82	\$540/\$270	\$220/\$110	462
CLAIM FEES			
Total Claims	16 - 20 = 0 X \$52		0
Independent Claims	4 - 3 = 1 X \$220		220
Multiple Dependent Claims	\$390 (if applicable)		0
Application Size Fee (over 100) - for each additional 50 sheets (\$270 / \$135)			0
TOTAL CLAIM FEES			220
Reduction of Claim Fees by ½ for Filing by Small Entity.		☒	110
TOTAL FILING AND CLAIM FEES			572
☒ The Commissioner is hereby authorized to charge counsel's Deposit Acct. No. 50-2862 for the filing fees, claim fees and any additional fees.			

Respectfully submitted,

Dated: Sept 20, 2010By: David B. Murphy

David B. Murphy
Reg. No. 31,125
Attorney for Applicant

Address all Correspondence to
34263

NB1:804124.1

S P E C I F I C A T I O N

APPARATUS, SYSTEMS AND METHODS FOR IMPLEMENTING
ENHANCED GAMING AND PRIZING PARAMETERS
IN AN ELECTRONIC ENVIRONMENTRelated Application Information

[0001] This application is a division of Application No. 10/654,585, filed September 2, 2003; which is a continuation-in-part of Application No. 10/123,861, filed April 15, 2002, now published as US-2003-0060261-A1, which is a continuation-in-part of Application No. 09/965,620, filed September 26, 2001, now U.S. Patent 6,811,484, which is a continuation-in-part of Application No. 09/672,179, filed September 27, 2000, now U.S. Patent No. 6,488,280, all of which are incorporated herein by reference as if full set forth herein.

[0002] Additionally, this application is related to application Serial No. 09/585,987, filed June 2, 2000, now U.S. Patent No. 6,565,084, which is incorporated herein by reference as if fully set forth herein.

Field of the Invention

[0003] These inventions relate to methods, and systems and apparatus for their implementation, of unique player participation games, and for improved methods of play for games of chance and skill. More particularly, these inventions relate to new and improved games involving player participation in a broadcast medium, such as television, and in other communication media, such as over the Internet, mobile phones or other communications networks and devices.

Background of the Invention

[0004] Player participation games fall broadly under the categories of games of chance and games of skill. One of the main forms of games of chance is lotteries, which by definition, involve the three elements of: 1) prize, 2) chance and 3) consideration. If these three elements are present, then the game is considered to be a lottery, and is typically then run by a governmental entity. In the United States, lotteries are typically run by the individual

states, or collectively by a group of states. In other countries, it is typically the national government that runs the lottery. Countries and states attempt to strictly limit the game play to their geographic boundaries. For example in Austria, while electronic access to the game may be available over the Internet, in order to play the person must have a bank account in Austria and be able to navigate the non-english menu.

[0005] Games have been conducted in any of a number of formats. Certainly, live, in person games have been performed. Yet other games have been played and broadcast over a broadcast medium, such as radio or television. Yet other games have been played through active communication media, such as the telephone, or over a communication network such as the Internet.

[0006] Various attempts have been made to provide game play over the Internet. By way of example, the game show Jeopardy® has been placed on the Sony site.

[0007] Various other attempts have been made to extend the general concept of gambling to broad communication media, such as the Internet. For example, United States Patent No. 5,800,268 entitled, "Method of Participating in a Live Casino Game from a Remote Location" has been asserted in a litigation in against an off shore corporation. The '268 patent discloses a system in which a player may participate in a live casino game from a location remote from the casino. A player interface station, such as a computer terminal or other special input device, is connected by a communication line to the casino. A second communication line is established from the casino to the player's financial institution. The player is presented with an image of an actual "live" game. The player then participates directly as if they were physically present at the casino. A wager is cleared with the player's financial institution to insure adequate resources to cover the bet.

[0008] United States patent no. 4,845,739 to Ronald A. Katz is entitled, "Telephonic - Interface Statistical Analysis System". The patent describes various operating formats, including a format to be performed in association with television media. Specifically, in one embodiment, a real-time format is provided in which television viewers participate on a real-time basis in a game show for prizes. Expanded audience participation is achieved. Various levels of qualification are provided, such as for a child's television game format is utilized, parental clearance may be required. The use of personal identification numbers (pin numbers)

is disclosed. In one implementation, the caller is prompted to identify which of the actual studio of audience participants the caller will be aligned with. Additionally, the caller may be instructed to indicate the extent of a wager. As the game progresses, the individual player's accounts are credited or debited, thereby providing on-going accounting data. In yet another implementation, a non real-time operation is provided. Such a show might involve a quiz for callers based on their ability to perceive and remember occurrences within the show. Pre-registration is optionally utilized. In this implementation, a sequence or time clock could be utilized in order to limit or control individual interfaces to a specific time or geographic "window". In this way, the caller questions may be utilized across various time zones without the caller having obtained the question earlier than other callers within a given time zone.

[0009] In yet another patent issued to Ronald A. Katz, U.S. Patent No. 5,365,575 entitled "Telephonic-Interface Lottery System", various scratch off lottery tickets are described. One ticket includes a scratch off ticket having a first concealed area with a matching game, and a second scratch off area concealing a unique number. A player may call a specified telephone number to participate in a second chance game.

[00010] Berman, U.S. Patent No. 5,108,115 discloses a game show and method entitled "Interactive Game Show and Method for Achieving Interactive Communication Therewith". An interactive communication system is provided which permits individuals to electronically select at least one possible outcome of a plurality of outcomes of a future event. Successful contestants possibly share in a prize which is associated with the event. A home audience of a televised game show may electronically communicate a series of random numbers using their touch tone telephone to participate in the show.

[00011] Recently, various governmental entities and trade organization have addressed the issue of game play over the Internet. Senator Kyl has introduced a bill which could preclude the offering of Internet based gaming, though permitting states to offer Internet gambling. Consideration has been given to requiring that the states sponsored gaming be limited to an intranet, in an effort to limit those participating to persons physically resident within the states boundaries. Various international lottery organizations have promoted similar restrictions, namely, precluding the individuals offering of games of chance, and reserving that option exclusively to the state.

[00012] Various lottery formats are known to the art. In one classic format, a pre-determined number of tickets are provided with certain printed matter, such as numbers or other indicia, where the information is then obscured by a scratch off layer. By removing the layer and revealing the underlying information, the ticket holder may determine whether they have won or not. Various extensions have been made to a “virtual” scratch off ticket where no physical product is provided.

[00013] A conventional lottery proceeds as follows. First, a series of numbers are selected, either by the player or by some automated selection system, such as by computer. Upon the occurrence of a predefined event, such as on a set date and time, numbers are randomly chosen. Both mechanical methods, such as selection of ping-pong balls bearing numeric designations, or electronic means such as through a random number generator, may be utilized. The selected numbers are then provided to the participants, such as through a broadcast medium like newspapers, radio and television. Finally, the holder or holders of winning the tickets then present their ticket for payment.

[00014] In yet another aspect of game play, a typical television presented game show lasts on the order of one half hour. Various shorter format games or shows have been utilized, for example, a football based advertisement or game has been presented by IBM during televised football games under the name “you make the call”. Yet other shorter version games have been presented over web TV or on the game show network.

[00015] The television game show “Who Wants to be a Millionaire[®]” is believed to have originated in Britain, and has become extremely popular in the United States. The game is a trivia game. While being principally a game of skill, the nature of the questions, or the contestant’s knowledge of the potential answers, makes the game at times a guessing game or game of chance. The format consists of one contestant and one host. The contestant is presented with a question and four possible answers. If the contestant answers the question correctly, they advance to a next level, each level being associated with a higher monetary prize amount, which is roughly twice the amount of the preceding level. A contestant is given three “life lines”: a “50/50” where in two incorrect answers are removed, thereby leaving the correct answer and one incorrect answer, the “phone a friend”, wherein the contestant may call a friend by telephone and solicit their response to the question, subject to a 30 second

time limit, and an “ask the audience” option where the audience is polled regarding their view of the correct answer to the question. Various safe levels are established, such as at \$1,000.00 such that the contestant could be awarded that amount of money in the event that they fail to correctly answer a question. Finally, after a question is posed, the contestant may elect to discontinue play, and to receive that amount of money won at the preceding level.

[00016] Various proposals have been made to extend the game play experience, particularly in a scratch-off lottery environment. For example, in Kaye, U.S. Patent No. 5,569,082, entitled “Personal Computer Lottery Game”, methods and systems for playing a player interactive lottery type game are described. A gaming piece, e.g., a printed card, computer memory, disk, contains a “Destiny Code” which is an encrypted symbolic code signifying the outcome of the particular game of chance to be played by the player. Game play proceeds under computer processor control to reveal whether the player has won, and if so, how much, or whether they have lost. The Destiny Code itself contains the win/loss information, and if a win, the amount. The outcome of the game is forced in that the processor controls the outcome of the game of chance. For example, if the Destiny Code indicates that the player is to win \$75, the system can match the prize to the game play such that the desired outcome is achieved. If the predetermined outcome is a loss, the game play will include selection of losing numbers. Computer game play may be either local, such as at a stand alone terminal or remote through an on-line service. When played in the on-line environment, the Destiny Code is input by the player, and provides the encrypted information regarding the win (and amount) /loss outcome. In certain instances, the player may select the form of game to be played, e.g., a murder mystery, a horse race type game, or various card games. In the online environment, the system can store a Destiny Code and not allow the code to be played twice. A history file may include various information, such as the number of times the game medium was played, information about how many times the particular player has played, information about different habits of the player, and general information as to what has transpired in the game. A winning game medium is somehow marked to show that the particular Destiny Code has been played. Receipt of prize money may be made at a local machine or at a redemption location.

[00017] PCT Application No. WO 00/39761 in the name of Applicant Ingenio, Filiale DeLoto-Quebec, Inc., entitled "Computer Gambling Game". The game includes a computer program to provide a sequence of game states, which lead to a game outcome. A game seed is required by the computer program to generate one of the sequences of the games. Each game seed corresponds to one of the sequences of the game states. An initiator code is required to begin game play, that code being printed on an instant play lottery ticket or distributed via a computer network. The computer program utilizes a look-up table to retrieve the game seed corresponding to the initiator code. Oberthur Gaming Technologies has an integrated package of three lottery tickets and a compact disc which is sold through authorized lottery retailers. The compact disc contains a program having various games where entry of an access code is necessary to begin game play. The compact disc permits creation of a password, thereby providing limited access to the game. Winning tickets are redeemed at an authorized lottery retailer. The lottery ticket itself contains encoded information as to the win (and amount) / loss status of the ticket in that the retailer can scan the ticket to see if it is a winner.

[00018] Various lotteries have implemented guaranteed prizing structures. One known structure is the so-called GLEPS structure, standing for guaranteed low-end prizing structure. GLEPS prizing requires that some outcomes are at least partially determined. GLEPS prizing is typically used in relatively high turnover type games, e.g., scratch-off ticket lottery games. Finocchio U.S. Patent No. 5,317,135 entitled "Method and Apparatus for Validating Instant-Win Lottery Tickets" describes various GLEPS systems. The Finocchio system stores the status as 'paid' or 'not yet paid' of game tickets to be validated. The data is stored in the main memory of a computer. Game play occurs with conventional physical tickets. The electronic system merely validates the ticket.

[00019] Despite the wide spread participation in various forms of game play, as well as the suggestions for implementing those games on a mass communication network, such as through the telephone or Internet, the possibility for new games, or improved game play exists. In particular, there is a need for improved games of chance, which provide excitement for the player, and optionally a viewer audience.

Summary of the Invention

[00020] These inventions relate to methods, and associated systems and apparatus, for novel game play and/or electronic entertainment. In various embodiments, the games are games of chance, games of skill, or combinations of both.

[00021] Systems, apparatus and methods are provided for enhanced electronic entertainment, such as game play, over remote communications networks. The system may receive a number of mandated parameters. These parameters must be achieved by the system as a whole. These top level parameters may be mandated, fixed or defined, typically being provided by the game sponsor, such as a lottery. These precedential parameters form the boundary constraints or boundary conditions for the game. Exemplary mandated parameters may consist of prize pay out and win rates, and may include such factors as the minimum payout amount, the maximum payout amount, a defined percentage payout, the number of prizes, and/or the form of prizes. Within the system, the mandated parameters are generally input to the system, and preferably stored in memory within the system. Having received the mandated parameters, the system processor then selects among dependent variable parameters to implement game play and prizing in a way that achieve the mandated parameters. As such, the variable parameters may be considered to be derivative or dependant upon achieving the mandated parameters. Within the system, the processor may interact with a store of variable parameters information associated with the processing system. As a possible result of the processing of the variable parameter information, while ultimately subject to the mandatory parameters, the system then permits interaction with the users via the user interface. Optionally, the processing system may then interface with other systems, including the conventional lottery system, the required communications systems, and various financial systems to effect a complete interaction with the player.

[00022] The systems and methods of these inventions permit greatly enhanced flexibility in game play and the prizing experience for a player, while globally achieving the mandated parameters. These systems and methods may be utilized with any type of game play, including but not limited to predetermined games, outcome games and games of skill. Predetermined games are those in which a player's actions do not affect the game outcome. Predetermined games may be either scripted, wherein the result is *a priori* determined, or

dynamic, in which variable game play occurs. Outcome games, namely those in which a player's actions can affect the game's outcome, may include probability games, both simple probability games and hybrid games in which skill and probability affect the outcome, and games of skill.

[00023] There are any number of variable parameters available for game play ultimately serving to achieve the mandated parameters and/or provide for enhanced or optimized game play and prizing experience. By way of example, the game selection itself, whether done by the player or by the system, may be one variable parameter. Another variable parameter may be the game structure itself, such as in the use of decision points, numbers of levels of game play, and/or duration of game play. The game play experience may be modified such as where the system utilizes probabilities corresponding closely with real world probabilities. By way of example, a coin flip game even played electronically should appear to operate under a 50/50 percent probability. While the mandated parameters may constrain the game to provide prizing which could not be achieved through the use of the real world probabilities, the system and methods herein permit the use of the real world probabilities, but achieving the mandated parameters through modification of the prizing and pay out experience of the player. Within these systems and methods, greater flexibility is achieved with regard to the play on a particular individual event, while achieving the mandated parameters for the game as a whole.

[00024] The game play parameters and prizing structure parameters generally comprise that collection of variables that shape the game experience and define the prizing structure. Game play generally refers to the player experience, whether passive or active. By way of example, game play parameters may include the structure and operation of the gaming experience, such as the duration of game play, number of levels, the decision points, e.g., inducements for various game play options, GLEPS or other allocation variables, such as in the number or frequency of winning outcomes, and player experiences, such as the number of near wins. Again by way of example, the prizing structure parameters may include the desired payout amount, GLEPS or other allocation variables, the frequency of wins (1:X), overall number of winners and prizing structure and allocation of prizes.

[00025] Generally, the methods consist of a series of electronic interactions between the user of the system, as players of games or interacting users with an entertainment device, which are controlled to achieve desired game play and prizing criteria. By varying the interaction of the system with the users so as to achieve the desired game play and prizing parameters, the game experience may be enhanced while also ensuring that the desired prizing criteria are achieved.

[00026] In one aspect, the games described herein may be played either as a predetermined game or a game in which the player's actions determine the outcome, or a hybrid or combination of the two. In a predetermined outcome scenario, the system has determined which ticket or tickets are winners, or at what level the win will be paid, and the action of the player has no impact on the outcome of the game play. While the appearance of selection may still appear to be "random" to the player, the system may select the required number or other indicia in order to force the predetermined outcome. In the case of a probability game, the outcome is determined based upon the actions of the player. However, the constraints imposed by the prizing parameters may require that some game events are forced, such that the necessary prizing outcome is achieved.

[00027] Prizing results fulfilling the prizing parameters may be calculated prior to game play, or may be calculated according to an algorithm as the game proceeds. The system may ensure that the predefined prizing criteria are achieved through various methods. For example, if the player's actions actually determined the outcome of a particular game, the system could ensure that any possible prize the player may receive is available. One option is to utilize a prize board to 'even up', that is, apply the prizing criteria to the possible outcomes such that the prizing criteria are met.

[00028] In one implementation, prizing structure may implement a prizing structure which includes a predefined number of lower tier prizes. The allocation of prizes may be defined in various ways, such as by defined numbers and values of prizes for a given number of plays, system-wide for every Nth play, or based on the number of plays for a particular player, or groups of players, or based on the source of the play, such as a given retailer, or by the geographic region of the source of the play, or based on a time parameter, such as a predefined number of wins of certain amounts per week.

[00029] The mode of interaction may vary. For example, the series of interactions with the users, such as through visual displays and audio experience, may be determined by the system and then be revealed.

[00030] In certain games, the entertainment may be broadly divided into a first game play phase and a second prizing phase. The use of a second prizing phase, or “prize board” phase, of the interactive electronic game play lends flexibility to game play while permitting application of various prizing structures. Game play in the first phase may be of any manner, whether predetermined, or where the player’s actions determine the game outcome, or a combination of the two, such as in a hybrid game. The game play in the second phase may then apply the prizing parameters such that the correct prizing payouts are achieved, irrespective of the results from the first phase of game play. Any prizing structure may be imposed during the prize reveal, even if the prizing amounts differ from those which could be strictly calculated according to probabilities. For example, a true probability game may suggest that the payout should be of a first amount, but the system may apply predefined imposed prizing parameters which specify the payout amount to be different. By providing a second phase for prize reveal, the amount or mode of prize may be set as defined by the rules.

[00031] In yet another aspect, game play in the first phase may be made to simulate game play using real world or actual probabilities. The results provided to the player in the first phase may be set to provide winning outcomes which would be expected based on true game probabilities. The predefined prizing parameters are utilized in the second, prizing phase to ensure that the game as a whole achieves the proper payout. By separating the first play phase from the prizing phase, the player experience in the first phase may be set as desired. For example, the first phase game play may be set where the player ‘wins’ at a probability greater than the true game probability. Since the player must complete the prizing phase, the system can correct the first phase perception of a heightened probability of wins in the second, prizing phase. The system may also provide the player with an enhanced number of ‘near wins’, such as where the player achieves a score which was close to a win, but not sufficient to win. Player interest may be maintained, while also maintaining the prizing structure and parameters.

[00032] In yet another aspect of this invention, a set or series of game plays will have a set or series of outcomes, but a particular game play is not specifically associated with a given outcome. This system permits game play where the player's actions can determine the outcome of the individual game, but where the outcome for a set or series of game plays is predefined. A player provides input for game play, where for at least some players their actions determine their individual outcome. In operation, a set of outcomes is defined for multiple plays. Prior to individual game play, an initial check is made to determine whether any possible outcome is unavailable. If all possible outcomes are available, the player plays the game where their actions determine, at least in part, the outcome of the game. The player's individual outcome, e.g., a \$ 5 win of a hand of blackjack, is selected from the set of outcomes and awarded to the player. If certain outcomes are no longer available in the set of outcomes, e.g., all of the \$ 5 wins are gone, the system will, if necessary, cause game play to proceed such that the outcome is one which still exists in the set. After an outcome is presented to the player, it is removed from the set. In this way, the game sponsor or system has a predefined pay out schedule, but individual's game play may determine the actual outcome for at least some players. Generally, as the set of unclaimed outcomes decreases, the system will force more outcomes for the individual game play.

[00033] In one of the instant inventions, a game is provided in which the player must communicate electronically with a remote location which contains the information as to whether a player will win or lose the game, and if they win, the prize that they will receive. In one implementation, a lottery game, such as a scratch off lottery game, may include a unique access or Ticket Identification Number (TIN). The TIN may be purchased through the conventional in-store lottery network or may be obtained electronically, such as where an account or other payment mechanism is established. In order to determine whether the player is a winner, the player may electronically access a remote site. Modes of electronic addressing of the remote site include internet access, cable access, or access through a conventional communication network such as by a phone. The user is prompted to enter the TIN number, which is used by the system to access memory to determine whether the player has won or lost, and if they have won, the prize for winning. Game play proceeds via the

electronic system in a way so as to ultimately inform the player as to whether they have won or lost and if appropriate, as to their prize.

[00034] The TIN may optionally be information bearing, though the meaning of the information may not be recognized by the user. By way of example, the TIN or other number may identify the application or game to be played. It may specify other variable information about game play, such as the identity of the game, either one game or a set of games, the level of difficulty of game play, win/loss status of the ticket, prize amount, if any. The TIN or other number may identify the player, such as where the player has registered or otherwise has an account with the system. Through use of an information bearing number being provided to the user, some or all game functions may be performed locally. For example, if the player were to receive multiple numbers corresponding to game play, and the numbers were downloaded to a mobile device, the game could be played at a later time, with its full functionality, but without necessarily connecting (or reconnecting) to the remote portions of the system. As these unique numbers are generated, or provided from the system to the player, or indicated as having been played or redeemed, they should be designated as such in the system, such that the number is consumed or crossed off the list of valid numbers. Optionally, validity checks may be performed on the numbers prior to permitting use.

[00035] When implemented in conjunction with a lottery type game, the system utilized consists of the lottery system, such as the online terminals located at various vendor locations, and additionally includes communication paths between the electronic game play path, e.g., via the internet through website game play, and its interaction with the lottery system and its associated database. The lottery processing system may be separate from or integrated with the servers and systems which permit electronic game play. These servers or systems may access information, such as ticket database information, financial data or lottery real-time information.

[00036] By way of a more specific example, the lottery game may comprise a conventional scratch-off type game, and include a second or auxiliary game with the base game, such as by providing the two games on a given lottery ticket. The second game includes at least the provision of TIN number information for the player to electronically access the game play system. Optionally, the second game may include a scratch-off aspect on the same ticket