## (19) World Intellectual Property Organization

International Bureau





# (43) International Publication Date 23 March 2006 (23.03.2006)

(10) International Publication Number WO 2006/032066 A2

- (51) International Patent Classification: Not classified
- (21) International Application Number:

PCT/ZA2005/000142

(22) International Filing Date:

16 September 2005 (16.09.2005)

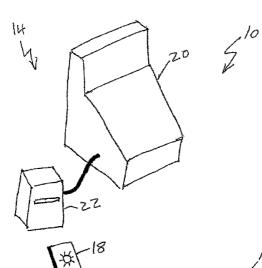
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:

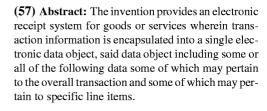
2004/7453 16 September 2004 (16.09.2004) ZA

- (71) Applicant and
- (72) Inventor: SCHOLES, Michael, Timothy [ZA/ZA]; 11 HALFORD AVENUE, HIGHLANDS NORTH, EXTENSION 4, 2192 JOHANNESBURG (ZA).
- (74) Agent: HAHN & HAHN INC. WHEELER, CJ, DUNLOP, AJS; WILLIAMS, VW; LUTEREK, JF; MICHAEL, C; VENTER, PRC; BERNDT, C; 222 RICHARD STREET, HATFIELD, 0083 PRETORIA (ZA).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

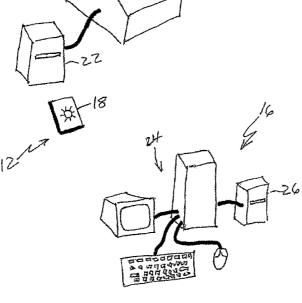
[Continued on next page]

(54) Title: ELECTRONIC RECORDAL OF BUSINESS DOCUMENTS









## WO 2006/032066 A2



#### Published:

 without international search report and to be republished upon receipt of that report 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.

## **ELECTRONIC RECORDAL OF BUSINESS DOCUMENTS**

#### Field of the Invention

This invention relates to the electronic recordal of business documents. More particularly it relates to electronic information receipting. Thus it relates to an electronic receipt; a storage device for storing an electronic receipt; software for the creation and management of such receipts; receipting equipment for supplying an electronic receipt; a system for supplying, storing, and analysing electronic receipts; and a method of supplying and storing and retrieving receipts. The invention also relates to the linking of transactions to entities.

## **Background to the Invention**

At present when consumers, both business and private, purchase goods or services they are provided with a paper receipt or a non-formatted i.e. flat form electronic receipt. If the consumer wishes to keep these receipts he must have a filing system and either he himself, or staff employed for the purpose, must file these paper receipts. This is time consuming, inefficient and, if a receipt is misfiled, it is very difficult to find it. Also, if the consumer wishes to return any goods, or wishes to rely on a guarantee in respect of the goods or services, the relevant receipt must be found, removed from the filing system, and presented to the supplier. Guarantees are often issued separately from the receipts. In addition, manual intervention is required to enter details of the purchase into a computerised accounting system or stock management system of the consumer or small business owner. In the business arena, EDI and other standards allow some of this information to be transmitted and stored in electronic form. However, this is of no use to normal consumers and small business owners.

## **Summary of the Invention**

30

25

15

20

According to the invention there is provided an electronic receipt for goods or services that is multi-layered in that it includes two or more of the following layers of data including but not limited to a sales record as in a conventional receipt, product data, purchasers data.

The invention provides a system and method whereby all useful transaction information is encapsulated into a single electronic data object; and a system whereby use and implementation of such objects is afforded.

5

The electronic receipts may be independent of any particular retailer and no direct prior relationship between retailer and purchaser is required. Further, the electronic receipting may be Independent of any particular method of payment.

10

15

20

In this specification the term GUID is used to denote a global user identification. The concept of GUID is intended to convey that a number of identification means are associated with an entity to be identified, for example, mobile telephone serial number, sim card identifier, smart card, embedded software, biometric data, credit card data, national identification data such as passport number, social security, id book, drivers license, or any other such data, which can then be used, either separately or together to

identify an entity such a person, a company, or the like.

The GUID also refers to digitized and encrypted forms of any of the above mentioned identifiers e.g. if a fingerprint is provided, then the file or data (the output of an algorithm) which are uniquely linked to the fingerprint will also be considered as a GUID. Here GUID also refers to any unique identifier assigned permanently or temporarily to the entity, based on any other form of identification, for the purpose of identification.

25

Furthermore, the abbreviation ER is used throughout the specification to denote an electronic receipt of the invention.

The single electronic data object may serve as an electronic receipt.

The electronic data object may be locked against alteration by unauthorised parties.

30

Editing of the electronic data object may require an authentication code.

The electronic receipt may include data in a specified data format.

35

The electronic receipt may include data in a specified data format or layout but occurring

as any file type e.g .swx, .doc, .xml, .txt. , flat file, binary.

The electronic receipt may include data in a specified format in any encrypted form.

- The electronic receipt may include data and or files which need not be of the same sort but form a unified whole. This may be an abstract association or in the form of an archive file. Thus the electronic receipt may be a single file which includes a number of separate files in one or more formats.
- 10 The electronic receipt may include one or many files which may be stored and transmitted separately, but form a unified whole.

The electronic receipt may include some or all of the following data – some of which may pertain to the overall transaction and some of which may pertain to specific line items:

- 15 GUID
  - GUID identifier
  - transaction key from local Point-of-sale system
  - transaction key from central server
  - the name of the supplier of the goods or services;
- 20 the date, each item of goods or services was purchased;
  - serial number, if applicable;
  - model number, if applicable;
  - description of the goods or services;
  - the price thereof;
- 25 broad category into which the goods or services fall;
  - narrow category into which the goods or services fall;
  - an identifier for a specific item;
  - guarantee type
  - owner of guarantee
- 30 guarantee period;
  - guarantee code;
  - maintenance agreement period;
  - maintenance agreement code;
  - maintenance agreement type;
- images of the goods or services;

- sounds relevant to the goods or services;
- video of the goods or services;
- manufacturing data;
- seller data;
- 5 categorising data such as size, quality, and the like;
  - deliverable or a link to deliverable, if the object of the receipt includes software, executable files, media, a gift voucher, or the like;
  - digital signature of the receipting party, of purchaser, device;
  - encrypted data in form of attached files, or embedded in the receipt itself
- 10 activation code or token for activating the goods or services;
  - instruction manual;
  - total transaction amount;
  - amount tendered by purchaser;
  - change paid back to purchaser;
- 15 method of payment used by purchaser;
  - links to web pages, web sites, URI's;
  - sell-by dates;
  - use-by dates;
  - history of item ownership of items;
- 20 service type for a service level agreement;
  - service start date for service level agreement;
  - service end date for service level agreement;
  - service code;
  - loyalty rewards or points; and
- 25 expiry date.

35

The invention extends to a receipt storage device for storing an electronic receipt.

In a first implementation the receipt storage device may be portable. In a second implementation the receipt storage device may be a central, remote facility that is accessible via a communication network.

Thus, with the first implementation a consumer may acquire a receipt storage device and carry it around with him/her, and, when the consumer purchases goods or services, appropriate details are stored in the receipt storage device.

These details may include one or more of the following data, some of which may pertain to the overall transaction and some of which may pertain to specific line items:

- GUID
- 5 GUID identifier
  - transaction key from local Point-of-sale system
  - transaction key from central server
  - the name of the supplier of the goods or services;
  - the date, each item of goods or services was purchased;
- 10 serial number, if applicable;
  - model number, if applicable;
  - description of the goods or services;
  - the price thereof;
  - broad category into which the goods or services fall;
- narrow category into which the goods or services fall;
  - an identifier for a specific item;
  - guarantee type
  - owner of guarantee
  - guarantee period;
- 20 guarantee code;
  - maintenance agreement period;
  - maintenance agreement code;
  - maintenance agreement type;
  - images of the goods or services;
- sounds relevant to the goods or services;
  - video of the goods or services;
  - manufacturing data;
  - seller data;
  - categorising data such as size, quality, and the like;
- deliverable or a link to deliverable, if the object of the receipt includes software, executable files, media, a gift voucher, or the like;
  - digital signature of the receipting party, of purchaser, device;
  - encrypted data in form of attached files, or embedded in the receipt itself
  - activation code or token for activating the goods or services;
- 35 instruction manual;

- total transaction amount;
- amount tendered by purchaser;
- change paid back to purchaser;
- method of payment used by purchaser;
- links to web pages, web sites, URI's;
  - sell-by dates;

5

10

15

25

30

- use-by dates;
- history of item ownership of items;
- service type for a service level agreement;
- service start date for service level agreement;
  - service end date for service level agreement;
  - service code;
  - loyalty rewards or points; and
  - expiry date.

The receipt storage device may also contain a global user identification or GUID for the consumer. This GUID may be encoded and may be supplied by an authorized supplier of the receipt storage device when the consumer acquires the receipt storage device.

20 The electronic receipt may include a record of which type of GUID was used for a specific transaction.

The consumer may also acquire suitable software, specifically written to handle electronic receipts, for a PC or a workstation so that the information stored on the portable receipt storage device may be transferred to the PC or workstation for processing or for integration into accounting software resident on the PC or workstation. This software may also communicate with a central server to facilitate the transfer of electronic receipts, copying of electronic receipts, updating of the central server by the PC or workstation, or of the PC or workstation by the central server.

The receipt storage device may also have a processing means. Software specifically written to handle electronic receipts may be loaded onto the the portable device for the permanent storage, temporary storage, processing and organization of electronic receipts.

5 When a consumer purchases goods or services from a supplier, the consumer provides

the supplier with his GUID, and the GUID and the appropriate details are transmitted to the central, remote receipt storage device, via the communication network. Part or whole of electronic receipts may then be retrieved by retailers, purchasers, or other parties with access rights. Electronic receipts may be downloaded form centralised server to portable storage device or PC.

5

10

15

20

25

35

A combination of above i.e. part or whole of the electronic receipt may be sent to mobile device, part or whole of ER sent to centralised server. Also, ER's may be transferred from the central server to a mobile device. This could be used for the processing of ER's or so that ER can be presented to a retailer or manufacturer, to claim a guarantee service or return items.

The implementation includes includes the sending of some message to a mobile device or PC to indicate that the electronic receipt was received by the central server.

Conveniently, the communication network may be a dedicated network or it may be in the form of a virtual private network (VPN). With this second implementation, the GUID may be manually entered by the consumer, using a keypad or the like, or it may be electronically stored in an identifying component, such as a card, memory stick, cellphone or PDA.

POS: point-of-sale system which here defines the point at which the retail or other transactions take place. So refers to a cash register, computer with software to effect purchasing, or any other device able to effect and record a retail transaction including mobile phones, PDA's, laptop computers etc. Here the use is extended to include any computers or servers and/or software which allows for retails transactions to be recorded, locally or remotely. Thus every purchase of an item over the Internet will be seem as being facilitated by a POS system.

30 The electronic receipting and the communication system relates equally to real world transactions as it does to Internet based transactions, for example, on-line shopping.

In some industries, like the medical industry, the concept of electronic receipting is used in a limited manner where POS (point-of-sale) systems transfer data directly to a central server. Each different type of POS system has had to implement the interface to the main

server.

5

10

In accordance with the present invention, software which is dedicated to electronic receipting security, implementation, control and the like and which is independent of any particular POS system is provided and the electronic receipting information is transferred from the POS system to this dedicated software located on a local network of which the POS is a POP i.e. the POS is an application running on the same LAN, which software is referred herein as TP software, which replaces the need for the POS to establish a link to a remote server and the POS sends the electronic receipting data to the TP software which then sends a copy of the electronic receipt data, or any portion thereof, to a centralised server, and or, a copy to the purchaser using Internet, mobile phone, PDA, email, and the like. The TP software could be a stand alone application of a standard piece of software incorporated into the POS system software.

- The TP software may communicate with the central server before the electronic receipt data is transmitted, for example, to send a unique identifier to the TP software such as a unique receipt number, or for security purposes such as encryption. Thus 2 way communication may be utilised.
- 20 A TP device is a device which runs TP software or a portion thereof or an equivalent thereof.

The TP software may be used to, among other things

- Obtain a unique transaction identifiers and information from the central server before
  the electronic receipt is created. This information can then be attached as part of the
  electronic receipt which could be sent to a mobile storage device for electronic receipts.
  The mobile device then able to communicate with the central server using unique
  identifiers and other information which is not necessarily relevant to the POS system.
  - To verify and/or identify the retailer and or the retailers POS system
- To verify and/or identify the purchaser
  - To verify and/or identify any device
  - To check items associated with the sale e.g. to determine if a particular item has been identified as stolen
  - Prerequisite checking, conflict checking

The TP software may also communicate with the POS system during or after the creation of an electronic receipt, for example to pass the transaction identifier assigned by the central server to POS system, so the retailer able to communicate with central server using information originating from the central server.

5

The TP software may also communicate with portable electronic receipt carriers, before, during or after the electronic receipt has been created.

10 by t

The TP software may also communicate with PC's or other devices owned or designated by the purchaser via the Internet or other communications network before, during or after the electronic receipt has been created.

The TP software may be loaded onto mobile devices which could act as POS systems, for example, mobile phones, PDA's etc.

15

The TP software may transmit the electronic receipt data to a mobile device which stores the data, temporarily or otherwise, which in turn transmits the electronic receipt data or a portion thereof to the centralised server whether for permanent storage or for authentication purposes. This retransmits may be at scheduled times or on demand.

20

The invention extends to receipting equipment whereby a supplier of goods or services may supply details of goods or services purchased by a consumer to a receipt storage device.

25

The receipting equipment may be able to retrieve details of goods or services purchased by a consumer from the receipt storage device. In addition, in the event that the consumer wishes to return any of the purchased goods, the receipting equipment may be adapted to modify an appropriate record in the receipt storage device to indicate that the relevant goods have been returned.

30

According to a third aspect of the invention there is provided a system for supplying and recording electronic receipts, which includes a receipt storage device and receipting equipment, as described above.

The system may include the provision of a unique label for each item of goods or services,

said unique label including a unique code specific to a single item, which unique code may form part of the electronic receipt.

The unique label may be in the form of a nano-label, a bar code, a transponder, or the like.

The system may include the linking of guarantee information about a uniquely identified product to the terms and conditions of a guarantee for product category into which the product falls.

10

According to a fourth aspect of the invention, there is provided a method of supplying and storing receipts, which includes supplying and storing receipts electronically.

The method may include the retrieval of product specific information for supplying as part of the electronic receipt.

The invention also extends to:

- a system including software for a mobile device for the processing or for integration into accounting software, other software or is transferred to the central remote facility.;
- 20 a system which incorporates electronic transaction information with actual software products or links to software products;
  - a system which incorporates electronic transaction information with all item guarantees;
  - a system whereby each item automatically characterised;
  - Method for tracking ownership of particular items;
- 25 a system which incorporates encrypted data with transaction information excluding bar code, item code etc.;
  - a system for linking an entity to a transaction and all items contained in the transaction;
  - a system for linking an entity to a transaction and all items contained in the transaction by the use of a number of identification methods and artifacts; and
- 30 a system for verifying that an electronic receipt has been received by a centralised server.

### **Specific Description of the Invention**

The invention will now be described by way of non-limiting, illustrative examples with reference to the accompanying diagrammatic drawings, in which

Figure 1 shows a first implementation of a system in accordance with the invention for supplying and storing receipts electronically;

5 Figure 2 shows a second implementation of a system in accordance with the invention for supplying and storing receipts electronically;

Figure 3 shows the transmission of electronic receipt data to a central server;

10 Figure 4 shows the transmission of electronic data to a mobile device;

Figure 5 shows the global user identification system definition graphically; and

Figure 6 shows an example of the GUID.

15

35

Referring to the drawings, Figure 1 shows generally a first system for supplying and storing receipts electronically, designated generally by reference numeral 10. The system 10 has a portable receipt storage device 12, receipting equipment 14 and processing equipment 16. The receipt storage device 12 is in the form of a smart card 18. The receipting equipment 14 comprises a point of sale apparatus 20 and a card reader and writer 22. The processing equipment 16 comprises a PC 24 and a further card reader and writer 26. The point of sale apparatus 20 and the PC 24 have suitable software installed.

In use, a merchant owning the point of sale apparatus 20 registers with a supplier of the technology and acquires the card reader and writer 22 and the software and is given a unique ID which is embodied in the software. The software is installed in the point of sale apparatus 20 and the card reader and writer 22 connected thereto. A consumer similarly registers with supplier of the technology and acquires the smart card 18, the card reader and writer 26 and the software. The consumer is also given a unique ID which is embedded by the supplier in the smart card 18. The software is installed in the PC 24 and the card reader and writer 26 connected thereto.

When the consumer purchases goods from the merchant, he presents his smart card 18, which is inserted into the card reader and writer 22. The merchants ID, the date and time, and details of the goods purchased by the consumer are stored electronically on the smart

card 18. The consumer thus has an electronic receipt on a small portable device. The consumers ID, the date and time and details of the goods may also be stored by the merchant. When the consumer returns to his base, either his home, office, factory or other premises, he inserts the card 18 in his card reader and writer 26 and the information thereon is transferred to the PC 24, in a read only form. The software dedicated to the processing, organization and storage of electronic receipts does not permit the consumer to modify the data. The details may, however, be imported into an accounting package resident on the PC. The software also enables the consumer to sort the goods purchased into various classes for budgeting and analysis purposes. The software is also used to update other software applications, for example to update stock levels.

If the consumer wishes to return any particular item to the merchant from which it was purchased, he transfers the relevant information back to the card 18. The goods item and the card are then presented to the merchant who can then verify that the goods item was purchased from him and the date thereof. The fact that the goods item was returned is then recorded on the card 18.

10

15

20

25

30

Referring now to Figure 2, a second system for supplying and storing receipts electronically is shown, designated generally by reference numeral 30. This system 30 is similar to the system 10 shown in Figure 1 and is similarly referenced. However, in the system 30, the receipt storage device 12 is at a central, remote facility, comprising a server 32 and a storage unit 34. The point of sale apparatus 20 is connected to the server 32 using a VPN, via the Internet 36. The consumer has a magnetic stripe card 38 which has the consumer's ID. When the consumer buys goods, his ID, the merchant's ID, the date, time and details of the goods are transmitted to the server 32 and stored on the storage unit 34. The consumer may then access the data, via the Internet, using a browser and password, to download the data relevant to him.

Referring now to Figure 3, in some industries, like the medical industry, the concept of electronic receipting is used in a limited manner. Doctors use various software packages as POS (point-of-sale) systems. A central server exists (e.g. Discovery Medical Aid). Thus each different type of POS system has had to implement its own interface to the main server.

35 The invention proposes that the model for implementation includes software dedicated to

ER (electronic receipting) security, implementation, control etc. which is independent of any particular POS system – called here TP software.

The software sits on same network as the POS, and instead of the POS software communicating with a distant server, the POS sends the ER details to software sitting on the server. This software is then able to send a copy of the ER to a centralised server, and or, a copy to the purchaser using Internet, mobile phone, PDA, or email.

This concept of dedicated software is believed to be important. It may be required that the TP software communicate with the central server before the actual ER is sent. This could be to send a unique identifier to the TP software e.g. a unique receipt number, or for security purposes e.g. encryption. Thus we have potential 2 way communication.

It is proposed that this TP software is loaded on mobile devices which could act as POS systems e.g. mobile phones, PDA's etc.

Referring now to Figure 4, implementation of the invention includes the use of mobile devices, as for communication between mobile devices and the centralised server. So an ER could be sent to a mobile device, and then later to as centralised server for authentication.

Referring now to Figure 5, Presently, for example in medical aid industry, only a single form of identification is used e.g. medical aid number.

In this patent, the term GUID is introduced for identification and verification of electronic receipts, this GUID includes information regarding mobile devices (cell phone chip, PDA, embedded software), biometric data, credit card number, ID number, bank card number, smart card, and other such data.

30 The ER is linked to a GUID.

The GUID allows for a flexible identification system i.e. the verification ER and ER system is not limited to any one of these means of identification. So purchaser may use any one or a combination of these for means of identification as shown in Figure 5.

For example, a customer makes a purchase at a retailer using a credit card (the credit card number is a specific instance of a GUID). Via the credit card number, the electronic receipt is linked to an entity – the purchaser. One of the items purchased which is included in the electronic receipt has a guarantee. The purchaser now goes to the manufacturer of the item to claim on the guarantee, but does not have the credit card. Instead, the manufacturer is able to access the central server to verify that the person actually purchased the item using the persons fingerprint (another specific instance of a GUID).

The GUID system is integrally linked to electronic receipting, the claiming of guarantees, insurance claims etc.

In Figure 6, each primary entity, for example a person is given a unique identifier (primary identifier) by the GUID system. This could be an identifier which already exists, for example an ID number or company registration number. Then a number of other identifiers are linked to the primary entity. Also, to each primary entity/identifier is linked to core data The following may be linked to the entity

- Biometric data
- Credit card number
- Bank card

10

15

20

25

30

The core data could consist of certain identifiers as specified above, as well as additional information.

For example we may have for a person X having the following core data

Name, address, age, sex, country of origin etc.

This GUID information is stored on a central server to which relevant parties have access. Any party using the system is able to provide the central system with any one a number of specified ID, and the central server will return the primary identifier, one or more of the other identifiers, together with any relevant core information on the primary entity.

If the consumer returns any goods item the relevant details are retrieved by the merchant from the receipt storage device 12 and the relevant record modified to reflect that the goods item was returned.

The claims which follow form an integral part of the disclosure of the invention, as if specifically reproduced above, and the disclosure hereabove and the claims should be read not to be in conflict.

#### Claims

5

1. An electronic receipt system for goods or services wherein transaction information is encapsulated into a single electronic data object, said data object including some or all of the following data some of which may pertain to the overall transaction and some of which may pertain to specific line items:

- GUID;
- GUID identifier:
- 10 transaction key from local Point-of-sale system;
  - transaction key from central server;
  - the name of the supplier of the goods or services;
  - the date, each item of goods or services was purchased;
  - serial number, if applicable;
- 15 model number, if applicable;
  - description of the goods or services;
  - the price thereof;
  - broad category into which the goods or services fall;
  - narrow category into which the goods or services fall;
- 20 an identifier for a specific item;
  - guarantee type;
  - owner of guarantee;
  - guarantee period;
  - guarantee code;
- 25 maintenance agreement period;
  - maintenance agreement code;
  - maintenance agreement type;
  - images of the goods or services;
  - sounds relevant to the goods or services;
- 30 video of the goods or services;
  - manufacturing data;
  - seller data;

- categorising data such as size, quality, and the like;
- deliverable or a link to deliverable, if the object of the receipt includes software, executable files, media, a gift voucher, or the like;

- digital signature of the receipting party, of purchaser, device;
- encrypted data in form of attached files, or embedded in the receipt itself;
- activation code or token for activating the goods or services;
- instruction manual;
- 5 total transaction amount;
  - amount tendered by purchaser;
  - change paid back to purchaser;
  - method of payment used by purchaser;
  - links to web pages, web sites, URI's;
- 10 sell-by dates;
  - use-by dates;
  - history of item ownership of items;
  - service type for a service level agreement;
  - service code;
- service start date for service level agreement;
  - service end date for service level agreement;
  - loyalty rewards or points; and
  - expiry date.

25

30

- 2. An electronic receipt system as claimed in claim 1, wherein the data object is independent of any particular retailer and no direct prior relationship between retailer and purchaser is required.
  - 3. An electronic receipt system as claimed in claim 1, which electronic receipt is independent of any particular method of payment.
  - 4. An electronic receipt system as claimed in any one of the preceding claims, wherein the GUID information of a primary entity is stored on a central server to which relevant parties have access and any party authorised to use the system is able to provide the central system with one or more of a number of specified GUID data, and the central server returns a primary identifier, one or more of the other identifiers, together with any relevant core information on the primary entity.
  - 5. An electronic receipt system as claimed in any one of the preceding claims, wherein the receipt is stored in a receipt storage device.

6. An electronic receipt system as claimed in claim 5, wherein the receipt storage device is portable.

- 7. An electronic receipt system as claimed in claim 5, wherein the receipt storage device is a central, remote facility that is accessible via a communication network.
  - 8. An electronic receipt system as claimed in any one of claims 5 to 7, wherein the receipt storage device has a processing means and software written to handle electronic receipts is loaded onto the the portable device for the permanent storage, temporary storage, analysis, processing and organization of electronic receipts.

10

15

20

- 9. An electronic receipt system as claimed in claim 7 or 8, wherein when a consumer purchases goods or services from a supplier, the consumer provides the supplier with one or more portion of the GUID, and the GUID and the appropriate details are transmitted to the central, remote receipt storage device, via the communication network so that part or whole of the electronic receipts is retrievable by retailers, purchasers, or other parties with access rights.
- 10. An electronic receipt system as claimed in Kalaim 9, wherein part or whole of the electronic receipt is transmittable to the mobile device, part or whole of electronic receipt is transmittable to the centralised server, and the electronic receipt is transferrable from the central server to a mobile device.
- 11. An electronic receipt system as claimed in any one of claims 7 to 10, wherein a message is sent to a mobile device or PC to indicate that the electronic receipt was received by the central server.
- 12. An electronic receipt system as claimed in any one of claims 7 to 11, wherein the GUID is manually entered by the consumer, using a keypad, biometric reading device, or the like, or is electronically stored in an identifying component, such as a card, memory stick, cellphone, or PDA.
- 13. An electronic receipt system as claimed in any one of claims 5 to 12, wherein

software which is dedicated to electronic receipting security, implementation, control and the like and which is independent of any particular point of sale (POS) system is provided and the electronic receipting information is transferred from the POS system to this dedicated software, which dedicated software is located on a local network on which the POS is also running, thereby replacing the need for the POS to establish a link to a remote server and the POS sends the electronic receipting data to the TP software which then sends a copy of the electronic receipt data, or any portion thereof, to a centralised server, and/or, a copy to the purchaser using communication means selected from Internet, mobile phone, PDA, email, and the like.

- 14. An electronic receipt system as claimed in claim 13, wherein the TP software is a stand alone application of a standard piece of software incorporated into the POS system software.
- 15. An electronic receipt system as claimed in claim 14, wherein the TP software is used to, among other things:
- obtain a unique transaction identifiers and information from the central server before
  the electronic receipt is created, which information is then attached as part of the
  electronic receipt which is sent to a mobile storage device for electronic receipts;
- permit the mobile device to communicate with the central server using unique identifiers and other information which is not necessarily relevant to the POS system;
- to verify and/or identify the retailer and or the retailers POS system;
- to verify and/or identify the purchaser;
- to verify and/or identify any device;
  - to check items associated with the sale such as whether a particular item has been identified as stolen; and
  - prerequisite checking and conflict checking.
- 30 16. An electronic receipt system as claimed in claim 14 or 15, wherein the TP software, or any other software, communicates with the POS system during or after the creation of an electronic receipt, to pass the transaction identifier assigned by the central server to POS system, so the retailer is able to communicate with central server using information originating from the central server.

5

10

15

17. An electronic receipt system as claimed in claim 14 to 16, wherein the TP software, or any other software, communicates with portable electronic receipt carriers, before, during or after the electronic receipt has been created.

- 18. An electronic receipt system as claimed in claims 14 to 17, wherein the TP software is loaded onto mobile devices which could act as POS systems, for example, mobile phones, PDA's etc.
- 19. An electronic receipt system as claimed in any one of claims 14 to 18, wherein the
  TP software, or any other software, transmits the electronic receipt data to a mobile
  device which stores the data, temporarily or otherwise, which in turn transmits the
  electronic receipt data or a portion thereof to the centralised server whether for
  permanent storage or for authentication purposes, which retransmittal is either at
  scheduled times or on demand.
- 20. An electronic receipting system as claimed in any one of the preceding claims, including software for a mobile device for processing, storage, analysis, organizing of electronic receipts or retail transaction information, or for integration or communication of such software with into accounting software, or any other
   software.

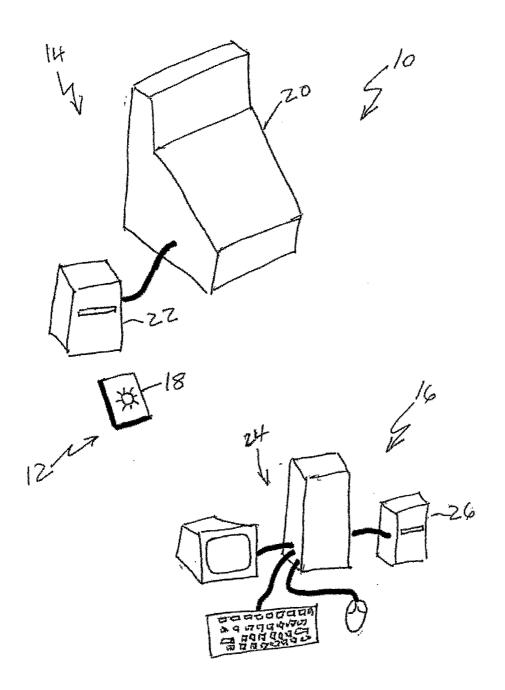


Figure 1

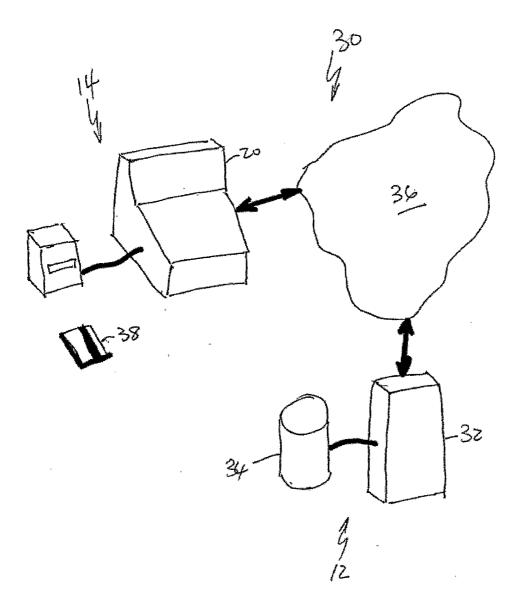


Figure 2

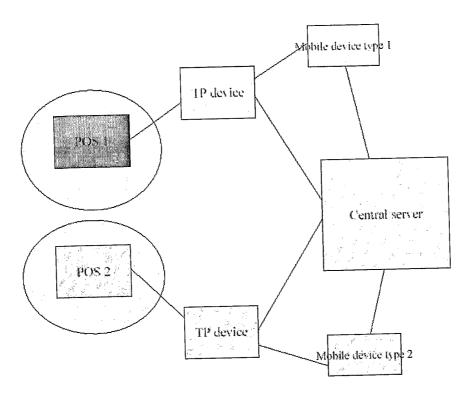


Figure 3

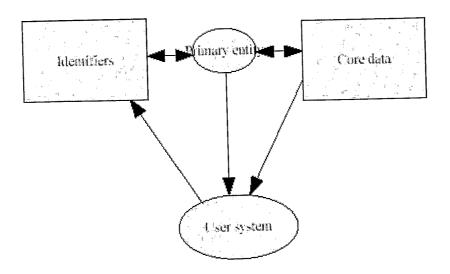


Figure 4

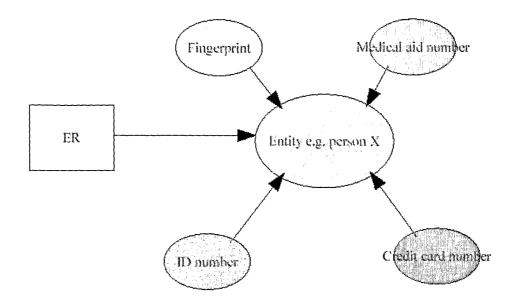


Figure 5

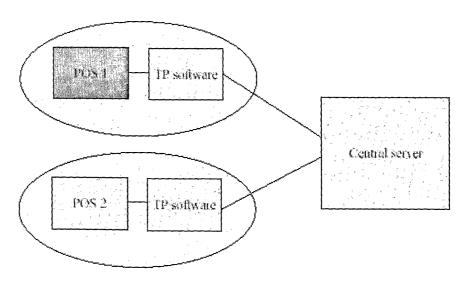


Figure 6