(12) (19)	PATENT AUSTRALIAN PATENT OFFICE	(11) Application No. AU 199916528 B2 (10) Patent No. 753933
(54)	Title Telephonic transaction system	
(51) ⁷	International Patent Classification(s) H04M 003/22 H04M 003/42 H04L 009/32	
(21)	Application No: 199916528	(22) Application Date: 1998.12.22
(87)	WIPO No: WO00/18088	
(30)	Priority Data	
(31)	Number(32)Date86067/981998.09.18	(33) Country AU
(43) (43) (44)	Publication Date :2000.04.10Publication Journal Date :2000.06.01Accepted Journal Date :2002.10.31	
(71)	Applicant(s) Linda Wright; Yong The	
(72)	Inventor(s) Linda Anne Wright	
(74)	Agent/Attorney FREEHILLS CARTER SMITH BEADLE,MLC 2000	C Centre, Martin Place, SYDNEY NSW
(56)	Related Art WO 97/17975 US 4598367 US 5416833	

ALI

ENT

TEN

WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



Ŀ	INTERNATIONAL APPLICATION PUBLISH		JNDER THE PATENT COOPERATION TREATT (PCT)	
	(51) International Patent Classification ⁶ :		(11) International Publication Number: WO 00/1808	8
	H04M 3/22, 3/42, H04L 9/32	A1_	(43) International Publication Date: 30 March 2000 (30.03.00	»
ALIAN ALIAN	 (21) International Application Number: PCT/AU (22) International Filing Date: 22 December 1998 (2 (30) Priority Data: 22 December 1998 (18.09.9 (30) Priority Data: 86067/98 18 September 1998 (18.09.9 74 (71)(72) Applicant and Inventor: WRIGHT, Linda, [AU/AU]; 144/6 14 Oxford Street, Darlinghur 2010 (AU). He young Goo North, Hullwiew Milpilas CA 95035 (us) (74) Agent: GRIFFITH HACK; G.P.O. Box 4164, Sydne 2001 (AU). (11) DIAL A PAYMENT (boo North Hillwiew Drute Milpilas CA 95035 (us) (71)(72) Linda Wright, 600 North Hillwiew Milpitas, CA 95035 (us) (71)(72) Linda Wright, 600 North Hillwiew Milpitas, CA 95035 (us) 	22.12.9 8) A A A A A A A A A A A A A A	 (81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BF BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KI KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SC SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YL ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UC ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, T. TM), European patent (AT, BE, CH, CY, DE, DK, ES, F FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI pater (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE SN, TD, TG). W Published With international search report. 	L,), 2, 1, 3, 1, 3, 1, 11 E,
5EC 113	Drive, Milpitas, CA 95035	, (ણક)	. CANT OFT	
TENTO	(54) Title: TELEPHONIC TRANSACTION SYSTEM	IO Tran How	18 18 Telephone Excharige Monitor 22 Database 26 saction Clearing 28	
11	(57) Abstract			

A telephone system comprising at least one exchange unit, a plurality of line connections each connected to one of the exchange units, each exchange unit having a corresponding monitor unit connected to it, wherein when a service is requested by a requestor utilising a first line connection from a provider utilising a second line connection, a first monitor unit corresponding to the exchange unit to which the second line connection is connected and a second monitor unit corresponding to the exchange unit to which the first line connection is connected are arranged to obtain stored information about the second line connection and information about the first line connection, respectively; and wherein the telephone system is arranged in a manner such that a transaction is allowed and processed depending on the information about the second line connection and the information about the first line connection.

TELEPHONIC TRANSACTION SYSTEM

Field of the Invention

The present invention relates broadly to an apparatus for the conduct of a transaction via a telephonic system and a method of using the same.

Background of the Invention

Many commercial transactions are today performed over the phone. For example, various goods and services can be obtained by a customer from a vendor by calling the vendor and providing details of credit cards or the like. Typically, the transaction will involve at least one authorisation process on the vendor's end but standards of such authorisation tests can vary significantly. There do exist various approaches to authorisation systems available

15 to the vendor, one of which is described in European Patent Application No. 91400094.8 (Publication No. 0440515 Al). Importantly, once the required details such as the credit card number, expiry date and name are provided by the customer for the authorisation process, the customer often does not participate in the finalisation of the transaction. This is done between the vendor and the credit provider/institution. Therefore, such systems have the disadvantage that whilst being a more or less effective safeguard for the vendor, the customer has no direct means

particular the amount debited against his credit card, are correct.

to ensure that the details of the transaction, in

An improved customer control over the transaction details is realised in pay-by-phone systems which are offered by more and more providers such as telecommunication companies and gas or electricity companies or more recently, the introduction of telephone banking in general. In such systems the customer controls the amounts transferred and further details of the transaction using a touch-tone capable telephone. On the vendor's side (i.e. typically an automated, voice prompted

10

5

20

25

30

- 2 -

receiver) transaction details may be checked against bill or account numbers communicated by the customer and authorisation processes similar to the ones discussed above may be employed.

- A great concern with the use of credit card details alone to pay for transactions made over the phone is that the credit card details can be used by an unauthorised person fraudulently. One approach to reduce this type of misuse has been to provide systems where the physical
- 10 presence of the card is required at the customer's end before transactions can be initiated. In such systems card reading devices have to be available at the customer's end. One such system is described in PCT Application No. PCT/US96/12704 (International Publication No. W097/06627).
- 15 In such systems, the transaction will only be authorised provided that information received by the card reading device has been checked by a clearing house, the link to which is established from the vendor's end. The information received within the card reading device is
- 20 transmitted via conventional telephone lines utilising digital-to-analogue Dual Tone Multi-Frequency (DTMF) tone generators and decoders in conjunction with common telephone switching apparati. However, as will be readily apparent, the physical presence of a card such as a credit
- 25 card is in no way a guarantee that only the authorised user is making the purchase. To further reduce the misuse of such systems techniques such as the use of Personal Identification Numbers (PIN) or other passwords is normally provided.
- 30

5

It would be desirable to provide an alternative approach to telephonic transactions both from the customer's and the vendor's point of view. <u>Summary of the Invention</u>



In accordance with a first aspect of the present invention, there is provided a telephone system comprising at least one exchange unit, each exchange unit having a

AMENDED SHEET

- 3 -

corresponding monitor unit; a plurality of line connections, each line connection being connected to one of the exchange units and each being identified by an associated number; wherein, when a service is requested by

- 5 a requestor on a requestor line connection from a provider on a provider line connection, a first monitor unit, corresponding to the exchange unit to which the provider line is connected, is arranged to determine, without user interaction, the number identifying the provider line
- 10 connection and to obtain provider authentication information stored in a provider database for the provider line connection, and a second monitor unit, corresponding to the exchange unit to which the requestor line connection is connected, is arranged to determine, without user
- 15 interaction, the number identifying the requestor line connection and to obtain requestor authentication information stored in a requestor database for the requestor line connection; and wherein the telephone system is arranged in a manner such that a transaction is allowed
- 20 and processed depending on the provider and requestor authentication information.

In accordance with the telephone system of the present invention, there is no requirement for an additional physical card or the like for the telephonic transaction.

- 25 Rather, the line connections themselves become part of the identification process during the transaction in that the monitor units evaluate information about the requestor and provider line connections.
- Preferably, when the service is requested, the first 30 monitor unit is arranged to obtain, after receiving an initiating signal from the second line connection, the provider authentication information and, depending on the provider authentication information, to notify the second monitor unit; the second monitor unit is arranged to
- 35 obtain, as a result of the notification by the first monitor unit, the requestor authentication information and, depending on the requestor authentication information, to notify the first monitor unit that a transaction can be initiated; and the first monitor unit is further arranged





to obtain, as a result of the notification by the second monitor unit, first transaction details from the provider and the second monitor unit is arranged, after the notification to the first monitor unit, to obtain second transaction details from the requestor; and the telephone system is arranged in a manner such that the transaction is allowed and processed depending on the first and second transaction details.

Accordingly, the transaction is allowed and processed 10 depending on a matching of transaction details provided by the provider and the requestor. Therefore, both parties have "control" over the transaction that is being processed.

In one embodiment, the first and/or second monitor 15 units are arranged to disenable a communication between the requestor and the provider.

Preferably, the first transaction details comprise a first amount of payment and the second transaction details comprise a second amount of payment and the telephone 20 system is arranged in a manner such that the transaction is allowed and processed only when the first and second amounts obtained are equal.

In one embodiment, the first and second monitor units are further arranged to verify that there is an active 25 telephonic connection between the requestor and the provider line connections.

Advantageously, the second monitor unit is further arranged to obtain a password from the requestor, and the transaction is not allowed if the passwords is incorrect when compared with a password stored as part of the authentication information.

In one embodiment, the provider and requestor databases are arranged to receive data related to the transaction for storage.

The data stored for the requestor line connection may comprise a debited amount resulting from the transaction

AMENDED SHEET



30

- 5 -

and the data stored for the provider line connection may comprise a credited amount resulting from the transaction.

Preferably, the system is further arranged to generate telephone bills for the requestor and provider line connections, and to include the data relating to the transaction on the telephone bills.

In one embodiment, the requestor authentication information comprises information about a credit history for transactions made from the requestor line connection.

In another embodiment, the first and/or second monitor units are further arranged to perform voice recognition of the requestor and/or the provider and the transaction is not allowed if the voices do not match with stored reference data as part of the authentication information.

- 15 In accordance with a second aspect of the present invention there is provided a method of conducting a telephonic transaction utilising a telephone system comprising at least one exchange unit, a plurality of line connections each connected to one of the exchange units,
- 20 wherein each line connection is identified by an associated number; the method comprising the steps of: a requestor requesting a service on a requestor line connection from a provider being on a provider line connection; obtaining provider authentication information stored in a provider
- 25 database for the provider line connection, wherein the number identifying the provider line connection is determined by the telephone system without user interaction; - obtaining requestor authentication information stored in a requestor database for the
- 30 requestor line connection, wherein the number identifying the requestor line connection is determined by the telephone system without user interaction; and allowing the transaction in relation to the requested service depending on the provider and requestor authentication information.

Preferably, the method comprises the steps of: requesting the service; receiving of an initiating signal by a first monitor unit of the telephone system; obtaining

35



10

rctina toi - 1 - 04 Receives Ib Junie da

of the provider authentication information by the first monitor unit; notification of a second monitor unit by the first monitor unit, depending on the provider authentication information; obtaining of the requestor

6

- 5 authentication information by the second monitor unit; notification of the first monitor unit by the second monitor unit that a transaction can be initiated, depending on the requestor authentication information; obtaining of first transaction details from the provider by the provider
- 10 monitor unit; obtaining of second transaction data from the requestor by the second monitor unit; and allowing and processing of the transaction depending on the first and second transaction details.
- In one embodiment, the method further comprises the 15 step of disenabling a communication between the requestor and the provider while the first and second transaction details are obtained.

Preferably, the first transaction details comprise a first amount of payment and the second transaction details comprise a second amount of payment and the transaction is allowed and processed only when the first and second amounts obtained are equal.

In one embodiment, the method further comprises the step of: verifying that there is an active telephonic 25 connection between the first and second line connections by the first and second monitor units.

Advantageously, the method further comprises the step of: obtaining a password from the requestor by the second monitor unit.

30

In one embodiment, the method further comprises the step of: storing data related to the transaction in the requestor and provider databases for the requestor and provider line connection respectively.

The data stored for the requestor line connection may comprise a debited amount resulting from the transaction and wherein the data stored for the provider line





connection may comprise a credited amount resulting from the transaction.

7 -

Preferably, the method further comprises the steps of: generating telephone bills for the requestor and provider line connections respectively; and including the data related to the transaction on the telephone bills.

In one embodiment, the second authentication information comprises information about a credit history for transactions made from the requestor line connection.

10

5

In another embodiment, The method further comprises the step of: performing voice recognition of the requestor and/or the provider by the first and/or second monitor units.

The present invention may be more readily understood from a description of preferred forms of a telephone system and method of utilising the same for telephonic transactions given below with reference to the accompanying drawings, by way of example only.

20 Brief Description of the Drawings

Figure 1 is a schematic diagram illustrating a telephone system in accordance with a first embodiment of the present invention.

Figure 2 is a schematic diagram illustrating a 25 telephone system in accordance with a second embodiment of the present invention.

Figure 3 is a flow chart illustrating the use in accordance with one embodiment of the present invention of the telephone system as illustrated in Figure 2 for

30 performing a telephonic transaction.



Figure 4 (divided into Figures 4a and 4b) is a flow chart illustrating the use in accordance with another embodiment of the present invention of the telephone system as illustrated in Figure 1 for performing a telephonic transaction.

- 8 -

5

Figure 5 is a schematic diagram illustrating examples of line connections which may be used on both the



WO 00/18088

customer's and the vendor's end of the telephone systems as illustrated in Figure 1 or Figure 2.

Detailed Description of the Preferred Embodiments

In Figure 1, the telephone system comprises two separated telephone exchanges 10 and 12, to which a customer touch-tone capable phone 14 and a vendor touchtone capable phone 16 are connected, respectively. The exchange units 10 and 12 are arranged such that telephonic connections can be made not only to phones connected to the particular exchange unit but also to phones connected to the other exchange unit. The interconnection 18 between the telephone exchange units 10 and 12 may be established by a line connection. However, it will be appreciated that the interconnection 18 may be established using various other means which may comprise RF signals between respective base stations or via satellite or via other such means as become available.

The telephone exchange units 10, 12 have connected to them associated monitor units 20, 22, which in turn are connected to associated databases 24, 26.

A central clearing house unit 28 is provided which is connected to each exchange unit and its associated monitor unit and database. The connection to the clearing house unit is again a telephonic connection which can be made utilising the telephone exchange units 10 and 12. In the embodiment illustrated in Figure 1, the telephone exchange units 10, 12 and its associated line connections can be operated by two different telecommunication companies which may be located in different countries. Importantly, in the

transaction system as illustrated in Figure 1, 30 customer/vendor relations are only limited by the fact that there must be the possibility of establishing a telephonic connection between them (provided that each exchange unit 10, 12 does have the associated monitor units and access to an associated database and a connection can be made to the clearing house unit). Importantly also,

15

10

5

25

20

- 10 -

modifications/additional units must only be added at the telephone exchange level rather than at the customer or vendor line connection end.

In Figure 2, there is illustrated a telephonic transaction system for "local" transactions, i.e. where a customer phone 40 and a vendor phone 42 are connected to the same telephone exchange unit 44.

In the following, an example operation of the components of the embodiment as illustrated in Fig. 2 will 10 be described in conjunction with the flow chart illustrated in Fig. 3. The reference numbers used refer to Fig. 2 unless otherwise stated.

Turning now to Figure 3, a first step is that a customer 40 places a call/opens a telephonic connection to a vendor 42. After the customer 40 and vendor 42 have agreed to initiate a transaction in relation to for example the purchase of goods to be delivered to the customer, the vendor initiates the transaction procedure by inputting an initiation trigger sequence on a touch tone capable device attached to the line connection (e.g. the key pad of the telephone). The monitor unit 48 associated with the telephone exchange 44 to which the vendor's and customer's line connections are connected receives the initiation trigger sequence and is thereby activated in relation to the planned transaction. The monitor unit 48 obtains information stored in an authorised vendor database 102 (see Fig. 3, and which is one portion of the database 46 in Figure 2) to determine whether or not the initiating vendor 42 is an authorised vendor or not. In the authorised vendor database 102 information is at least organised in a manner such that valid line connections (associated with separate telephone numbers) of authorised vendors are stored therein. Additional information in relation to specific telephone numbers/authorised vendors may be stored in the authorised vendor database 102 such as e.g. special fee regulations for a particular vendor.

15

20

25

30

35

PCT/AU98/01064

If the vendor 42 has initiated the transaction sequence from a line connection that is not stored in the authorised vendor database 102, the process is aborted.

- 11 -

- If the line connection is stored in the authorised vendor database 102, the monitor unit 48 checks whether or not there is an active telephonic connection from the vendor's line connection to another line connection or not by tracing the telephonic connection between the customer 40 and the vendor 42. If there is an active line
- 10 connection, the monitor unit 48 then checks whether the line connection to which a telephonic connection is made is stored in an authorised customer database 104 (see Fig. 3, and which is another portion of the database 46 in Figure 2). In the authorised customer database 104 information is
 - at least organised in a manner such that valid line connections (associated with separate telephone numbers) of authorised customers are stored therein. Additional information in relation to the specific telephone numbers/authorised customers may be stored in the
- 20 authorised customer database such as for example a credit limit for a particular customer. If the line connection to which a true telephonic connection is made from the vendor's line connection is not-an authorised customer, the process is aborted.

If the line connection to which an active telephone connection is made from the vendor's line connection is stored in the authorised customer database 104, the monitor unit 48 then prompts the customer to enter a Personal Identification Number (PIN) via touch tone. Again, should an invalid PIN number be entered, the process is aborted. If a valid PIN is entered, the monitor unit 48 prompts both the vendor 42 and the customer 40 to enter the amount of the planned transaction via touch tone. Should the amounts not agree, again, the process is aborted at that stage. While the amounts are entered by the vendor 42 and customer 40, the monitor unit 48 may disenable a direct

-5

15

25

30

· 12 -

communication between the line connections.

If the amounts agree, the monitor unit 48 generates the transaction information and this information may be transmitted to both parties via automated voice messages and the transaction details may be stored. Also, the transaction details will be forwarded to a clearing house unit 50. Within the clearing house unit 50, the transaction details will be further processed and recorded.

The clearing house unit 50 gives a final approval of the transaction and this approval is communicated back to the monitor unit 48 and/or database 46, where data related to the transaction can be stored for further processing.

In this embodiment, the clearing house unit 50 acts as an "independent" central transaction clearing facility which may be utilised by other parties and may be an internationally recognised clearing house facility.

In the following, an example operation of thecomponents of the embodiment as illustrated in Figure 1 will be given in conjunction with the flow chart illustrated in Figures 4a and 4b. In Figures 4a and 4b, the steps of the flow chart have been numbered and the description is given below with reference to the respective step numbers whereas the reference numbers refer to Figure 1 unless otherwise stated.

1. A Customer 14 places a voice or IVR (Interactive Voice Response) managed call to a vendor 16 to make a purchase or pay an account.

2. The vendor 16 or one of their operators, or an IVR response system makes a series of key presses on their touch-tone capable device, or generates the appropriate tones, initiating the transaction.

3. A monitor unit 22 at the vendor's exchange unit 12 hears the signal and takes control of the line between the customer and the vendor and normal voice communication is suspended.

20

15

10

25

30

PCT/AU98/01064

WO 00/18088

- 13 -

The monitor unit 22 checks to see if the vendor 4. is in good standing in respect of their member-vendor status according to the local database 26. Criteria for this evaluation is set by the owner of the database 26.

5

If so, the monitor unit 22 at the vendor's end 5. notifies a monitor unit 20 at the customer's end to prepare for a transaction.

The monitor unit 20 then traces the telephonic 6. connection between the customer 14 and the vendor 16 and establishes that there is an active telephonic connection. If the line is not active, the transaction is aborted with an appropriate message. Normal-voice communication is restored. This independent verification of the telephonic line between the customer 14 and the vendor 16 can increase 15 The security of the system significantly.

7. If an active line exists, the monitor unit 20 checks the customer database 24 and verifies that the customer is an acceptable credit customer as in the manner of step 4. above for vendors. Criteria for this evaluation is set by the owner of the database 24. Otherwise, the transaction is aborted with an appropriate message. Normal voice communication is restored.

The monitor unit 20 instructs the customer by IVR 8. voice, or by means appropriate to the service context, to enter a PIN number for verification.

9. If the PIN number is entered within a certain specified time, and is correct within a certain specified number of attempts, as determined by the Database 24, the monitor unit 20 notifies the monitor unit 22 that a transaction is possible.

If both monitors agree that a transaction is in 10. process, the monitor unit 22 instructs the vendor by IVR voice, or by means appropriate to the service context, to enter the amount of the transaction.

35

11. The monitor unit 22 informs the monitor unit 20 of the amount.

10

20

25

PCT/AU98/01064

WO-00/18088

- 14 -

12. The monitor unit 20 instructs the customer by IVR voice, or by means appropriate to the service context, to echo the amount using the touch key pad or other means to generate the appropriate tones on the customer's telephone.

13. If the echoed amount is correct, as assessed by the monitor unit 20, the monitor unit 20 informs the monitor unit 22 that the transaction has succeeded.

14. The monitor unit 20 generates a transaction number containing a code identifying the customer's telephone carrier, the exchange, the customer credit number, the transaction amount, and a unique number for the transaction. This number is supplied to the customer by voice, or by means appropriate to the service context. Other information may be supplied at the same time, so that the customer records will match the vendor records to complete a paired transaction.

15. This information is temporarily stored against the customer's record in the Database 24.

16. The same transaction number is forwarded to the 20 monitor unit 22 for relay to the vendor by IVR voice, or by means appropriate to the service context.

17. This information is temporarily stored against the vendor's record in the Database 26.

18. Normal communications are restored to both-ends of the line. Neither of the monitor units 20, 22 are in communication with each other from this point forward for purposes of this transaction.

19. The monitor unit 20 transmits the customer's portion of the transaction pair to the clearing house Unit 28.

20. The monitor unit 22 transmits the vendor's portion of the transaction pair to the clearing house Unit 28.

21. Both transmissions (steps 19 & 20) are matched upon arrival at clearing house unit 28 to make a complete transaction record.

10

15

25

30

35

22. The clearing house unit 28 automatically transmits one transaction statement to the vendor's telephone service company and a corresponding statement to the customer's telephone service company.

- 15

23. The vendor's telephone service company honours the credit to the vendor, submits an electronic invoice to the customer's telephone service company via the clearing house unit 28, and pays any fees and charges owing to the clearing house unit 28.

24. The customer's telephone service company "honours" the debt to the vendor's telephone service company and pays the electronic invoice, along with any fees and charges owing to the clearing house unit 28.

25. The clearing house unit 28 remits the payment amount from the customer's telephone service company to the vendor's telephone service company and notifies both telephone service companies that the transaction has been finalised.

It is noted that each of the databases 24 and 26 does comprise a customer database and a vendor database to allow "reverse roles" transactions between the exchange units 12 and 10.

It will be appreciated by a person skilled in the art that numerous variations and/or modifications may be made to the present invention as shown in the specific embodiments without departing from the spirit or scope of the invention as broadly described. The present embodiments are, therefore, to be considered in all respects to be illustrative and not restrictive.

For example, rather than having a voice or IVR communication between the customer and vendor, the "communication" can be made by using computers attached to line connections via modems to e.g. order goods or services from a vendor's Website on the Internet.

20

15

5

10

25

The claims defining the invention are

1. A telephone system comprising:

- at least one exchange unit, each exchange unit having a corresponding monitor unit;

5

- a plurality of line connections, each line connection being connected to one of the exchange units and each being identified by an associated number;

wherein, when a service is requested by a requestor on a requestor line connection from a provider on

10 a provider line connection, a first monitor unit, corresponding to the exchange unit to which the provider line is connected, is arranged to determine, without user interaction, the number identifying the provider line connection and to obtain provider authentication

- 15 information stored in a provider database for the provider line connection, and a second monitor unit, corresponding to the exchange unit to which the requestor line connection is connected, is arranged to determine, without user interaction, the number identifying the requestor line
- 20 connection and to obtain requestor authentication information stored in a requestor database for the requestor line connection; and

wherein the telephone system is arranged in a manner such that a transaction is allowed and processed depending on the provider and requestor authentication information.

2. A telephone system as claimed in claim 1, wherein:

when the service is requested, the first monitor unit is arranged to obtain, after receiving an
initiating signal from the second line connection, the provider authentication information and, depending on the provider authentication information, to notify the second monitor unit;

the second monitor unit is arranged to obtain,
 as a result of the notification by the first monitor unit,
 the requestor authentication information and, depending on
 the requestor authentication information, to notify the
 first monitor unit that a transaction can be initiated; and

AMENDED SHEET



- 17 -

wherein the first monitor unit is further arranged to obtain, as a result of the notification by the second monitor unit, first transaction details from the provider and the second monitor unit is arranged, after the notification to the first monitor unit, to obtain second transaction details from the requestor;

and the telephone system is arranged in a manner such that the transaction is allowed and processed depending on the first and second transaction details.

3. A telephone system as claimed in claims 1 or 2 wherein the first and/or second monitor units are arranged to disenable a communication between the requestor and the provider.

 A telephone system as claimed in claims 2 or 3,
 wherein the first transaction details comprise a first amount of payment and the second transaction details comprise a second amount of payment and the telephone system is arranged in a manner such that the transaction is allowed and processed only when the first and second
 amounts obtained are equal.

5. A telephone system as claimed in any one of the preceding claims wherein the first and second monitor units are further arranged to verify that there is an active telephonic connection between the requestor and the provider line connections.

6. A telephone system as claimed in any one of the preceding claims wherein the second monitor unit is further arranged to obtain a password from the requestor.

A telephone system as claimed in any one of the
 preceding claims wherein the provider and requestor
 databases are arranged to receive data related to the
 transaction for storage.

8. A telephone system as claimed in claim 7 wherein the data stored for the requestor line connection comprises a debited amount resulting from the transaction and the data stored for the provider line connection comprises a

AMENDED SHEET



5

10

credited amount resulting from the transaction.

.. /

9. A telephone system as claimed in claim 8, further arranged to generate telephone bills for the requestor and provider line connections, and to include the data relating to the transaction on the telephone bills.

10. A telephone system as claimed in any one of the preceding claims wherein the requestor authentication information comprises information about a credit history for transactions made from the requestor line connection.

11. A telephone system as claimed in any one of the preceding claims wherein the first and/or second monitor units are further arranged to perform voice recognition of the requestor and/or the provider.

12. A method of conducting a telephonic transaction 15 utilising a telephone system comprising at least one exchange unit, a plurality of line connections each connected to one of the exchange units, wherein each line connection is identified by an associated number; the method comprising the steps of:

- a requestor requesting a service on a requestor
 line connection from a provider being on a provider line
 connection;

obtaining provider authentication information stored in a provider database for the provider line
connection, wherein the number identifying the provider line connection is determined by the telephone system without user interaction;

 obtaining requestor authentication information stored in a requestor database for the requestor line
 connection, wherein the number identifying the requestor line connection is determined by the telephone system without user interaction; and

allowing the transaction in relation to the requested service depending on the provider and requestor authentication information.

13. The method as claimed in claim 12 comprising the steps of:

- requesting the service;

AMENDED SHEET

STRAJ, MU PART OF STRAJ

35

5

10

- 19 -

- receiving of an initiating signal by a first monitor unit of the telephone system;

- obtaining of the provider authentication information by the first monitor unit;

 notification of a second monitor unit by the first monitor unit, depending on the provider authentication information;

- obtaining of the requestor authentication information by the second monitor unit;

- notification of the first monitor unit by the second monitor unit that a transaction can be initiated, depending on the requestor authentication information;

- obtaining of first transaction details from the provider by the provider monitor unit;

- obtaining of second transaction data from the requestor by the second monitor unit; and

- allowing and processing of the transaction depending on the first and second transaction details.

14. A method as claimed in claim 13 further comprising
20 the step of disenabling a communication between the requestor and the provider while the first and second transaction details are obtained.

15. A method as claimed in claims 13 or 14, wherein the first transaction details comprise a first amount of payment and the second transaction details comprise a second amount of payment and the transaction is allowed and processed only when the first and second amounts obtained are equal.

16. A method as claimed in any one of claims 12 to 15,30 further comprising the step of:

- verifying that there is an active telephonic connection between the first and second line connections by the first and second monitor units.

17. A method as claimed in any one of claims 12 to 16, further comprising the step of:

- obtaining a password from the requestor by the

AMENDED SHEE IPEA/AU

RALPZ 35

5

10

second monitor unit.

18. A method as claimed in any one of claims 12 or 17, further comprising the step of:

storing data related to the transaction in the
requestor and provider databases for the requestor and
provider line connection respectively.

19. A method as claimed in claim 18 wherein the data stored for the requestor line connection comprises a debited amount resulting from the transaction and wherein the data stored for the provider line connection comprises a credited amount resulting from the transaction.

20. A method as claimed in claim 19, further comprising the steps of:

generating telephone bills for the requestorand provider line connections respectively; and

- including the data related to the transaction on the telephone bills.

21. A method as claimed in any one of claims 12 to 20, wherein the second authentication information comprises
20 information about a credit history for transactions made from the requestor line connection.

22. A method as claimed in any one of claims 12 to 21, further comprising the step of:

performing voice recognition of the requestor
 and/or the provider by the first and/or second monitor
 units.



1/6



FIG. 1



PCT/AU98/01064





FIG. 4a

PCT/AU98/01064



PCT/AU98/01064

616



FIG. 5