(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(54) Title: AN IMPROVED METHOD OF PURCHASING OR HIRING PRODUCTS ON THE INTERNET
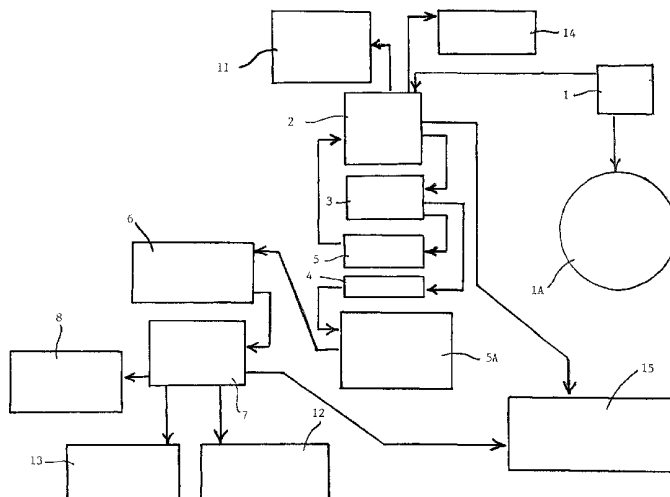
(57) Abstract: There is a method of conducting a product purchase or hire trasaction via the internet without the entry of a credit card number. The method includes the following steps. - a customer (1) accessing a shopping web site (1A) maintained by a merchant on the internet, - the customer (1) selecting the product for purchase or hire from the merchant, - the customer (1) accessing a second web site (2) maintained by a credit verification operator, - the customer entering personal identification information (3, 4) at the second web site (2), - the credit verification operator verifying the personal identification information against a data base (5A) containing one or more delivery addresses for the customer, - the credit verification operator validating the transaction with a credit source (6, 7), - the credit verification operator providing one of said delivery addresses to the merchant for delivery of the product (11), and - the credit source providing payment for said transaction to the benefit of the merchant (12).

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AN IMPROVED METHOD OF PURCHASING OR HIRING
PRODUCTS ON THE INTERNET

BACKGROUND OF THE INVENTION

This invention relates to the marketing of goods and services.
More particularly, although not exclusively it discloses an
improved method of purchasing or hiring products over the
internet.

While the purchase or hire of products via the internet is
faster and more convenient than conventional shopping it
currently involves a substantial financial risk to the
customer. In order to complete such transactions it is at
present necessary for the customer to provide a credit card
number to the merchant together with the authorisation to
charge the account. However, once this card number is entered
into the merchant's data base it is then possible for third
parties (e.g. computer hacks or dishonest employees) to access
it and make further unauthorised purchases. Indeed, credit
card fraud is estimated to cost hundreds of millions of
dollars annually.

SUMMARY OF THE INVENTION

It is therefore an object of this invention to ameliorate the
aforementioned disadvantage and accordingly a method of
conducting a product purchase or hire transaction via the
internet without the entry of a credit card number is
disclosed, said method including the steps of:-

- a customer accessing a shopping web site maintained by a
  merchant on the internet,

- said customer selecting said product for purchase or

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hire from said merchant,

- said customer accessing a second web site maintained by
  a credit verification operator,

- said customer entering personal identification
  information at said second web site,

- said credit verification operator verifying said
  personal identification information against a data
  base containing one or more registered addresses of said
  customer,

- said credit verification operator validating the
  transaction against a credit source, and

- said credit verification operator providing one of said
  registered addresses to said merchant for delivery of
  said product.

Preferably the credit verification operator validates the
purchase against a pre-approved credit limit from said credit
source before issuing a payment approval directly to the
merchant. Alternatively the operator may validate the
transaction by reference to the credit source which in turn
provides the payment approval to the merchant.

Preferably the personal identification information includes,
but is not limited to, the customers telephone number.

It is further preferred although not essential to the
invention that said credit source comprise a telephone service
provider and that the customer be billed for said transaction

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on the telephone account.

BRIEF DESCRIPTION OF THE DRAWINGS

One currently preferred embodiment of the invention will now

be described with reference to the attached drawings in which:

Figure 1 is a flow chart showing the basic transaction

steps for a customer purchase from an internet

merchant, and

Figure 2 illustrates a typical procedure by which a

customer can register with said credit

verification operator.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring first to figure 1 the customer at 1 accesses an

internet shopping site 1A maintained by a merchant and selects

a product for purchase or hire. The customer then opens the

appropriate icon to access a second web site 2 operated by the

credit verification operator (hereinafter called "Secure

Shop"). Upon an existing registration with Secure Shop being

confirmed or established at 3, 4 as described later he enters

his telephone number and/or PIN code. In the event that the

customer is not already registered an opportunity is

preferably provided at 5 for the customer to apply for

registration. Secure Shop at 5A verifies the customers

telephone number and/or PIN code against the telephone billing

address on its data base. Secure Shop at 6 then validates the

transaction with the credit provider at 7 which supplies a

payment approval number to the merchant at 8. Preferably said

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payment approval number is unique to that particular

transaction and therefore cannot be reused later for

unauthorised transactions. At 11 Secure Shop also provides the

customer's confidential registered address to the merchant for

delivery purposes. Preferable several delivery addresses may

be maintained on file for selection of the customer.

Alternatively Secure Shop may approve the transaction directly

to the merchant after clearing the transaction amount against

a credit limit on its data base for the customer pre-approved

by the credit provider.

The transaction is completed by the credit provider then

depositing the transaction amount to the account of the

merchant at 12 and billing the customer at 13. Preferably the

amount being debited to the customer's account is also

immediately confirmed to the customer by E-mail at 14. As

mentioned earlier the credit provider may be either the

telephone service provider or some other credit source such as

Visa or the like.

Preferably as mentioned earlier internet facilities are

provided at 15 by Secure Shop for initial registration of a

customer, increase of credit limit, change/addition of

registered addresses or the issue of a Secure Shop

magnetically encoded card. This card is particularly unique

because no numbers or other identifying particulars would be

embossed on the face of said card. The card could be used when
purchasing goods or services on credit other than over the
internet. By information magnetically encoded thereon
additional identification could be provided for credit
purchases by swiping the card and entry of a PIN and telephone
number. No signature would then be needed to complete the
transaction.

It is envisaged that a customer would be able to establish an
account with Secure Shop in three ways.

If the customer does not have a registered telephone account
initial registration would be made by postal application to
Secure Shop.

If the customer has a registered telephone account
registration would be obtainable on the Secure Shop web site
or at any internet merchant that offers the Secure Shop
option.

As example of a customer registration procedure via the
internet using a telephone number can be summarised as follows
with reference to figure 2.

STAGE 1

(a) The customer 1' logs onto Secure Shop web site 1A',

(b) the customer follows directions to enter his
telephone number e.g. 029934566.

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(c) the customer follows directions to enter his address e.g. 14/7 Kimberlie Street Sydney,

(d) the customer follows directions to enter his registered name for the aforementioned telephone number and address e.g. G. Gordon,

(e) the customer follows directions to enter his user name e.g. "JONNY T", and

(f) the customer follows directions to enter his E-mail address e.g. georgegordon@enet.com.au.

STAGE 2

(a) The above entered customer information is sent to a data base maintained by Secure Shop and cross-referenced with CPU2 (a telephone directory data base full time internet), and

(b) if the cross-reference matches then CPU2 forwards the information to CPU3 (Secure Shop data base with code access only).

STAGE 3

(a) The customer is recorded into CPU3 and allocated a serial number e.g. 003622 and the information is sent to CPU4 which is a direct link with the credit provider 7',

(b) the credit provider 7' allocates a unique approval number e.g. AN4685 for each purchase and returns this to CPU4,

(c) CPU3 retrieves this approval number and files it

with the previously allocated customer number e.g.
003632AN4685, and

(d) CPU3 then provides a PIN and sends it via CPU1 to
the customer for future use of his account.

Secure Shop now has on file only a serial number (e.g.
003632AN4582) of a customer G. Gordon of 14/7 Kimberlie Street
Sydney. There is no credit card information or other
confidential information on the customer at Secure Shop.

It will thus be appreciated that this invention at least in
the form of the embodiment described provides a novel and
improved method of purchasing or hiring products via the
internet. Throughout the transaction the customer's credit
card details are kept confidential and are not available to
either the merchant or Secure Shop. Further, the delivery of
the product is provided only to the customer's registered
address which is preferably the billing address for the
telephone account. Access to credit card details is thus
denied to unauthorised persons and moreover the customer card
holder is immediately made aware of all purchases through
delivery to the registered address only.

It is to be understood however that the example described is
only the currently preferred form of this invention and a wide
variety of modifications may be made to the system which would
be apparent to a person skilled in the art. For example the
amount and type of personal information required to register

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the customer may vary as could the formal procedure for validating or approving the transaction with the credit provider and merchant. The invention also extends to the use of any suitable type of software for running the system.

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The claims defining the invention are as follows:

1. A method of conducting a product purchase or hire
transaction via the internet without the entry of a credit
card number, said method including the steps of:-

- a customer accessing a shopping web site maintained by a
  merchant on the internet,

- said customer selecting said product for purchase or hire
  from said merchant,

- said customer accessing a second web site maintained by a
  credit verification operator,

- said customer entering personal identification
  information at said second web site,

- said credit verification operator verifying said personal
  identification information against a data base containing
  one or more delivery addresses for said customer,

- said credit verification operator validating the
  transaction with a credit source,

- said credit verification operator providing one of said
  delivery addresses to said merchant for delivery of said
  product, and

- said credit source providing payment for said transaction
  to the benefit of said merchant.

2. The method as claimed in claim 1 wherein said personal
information includes a telephone number registered in the name
of the customer.

3. The method as claimed in claim 2 wherein said personal
information further includes said one or more delivery
addresses and/or a PIN code.

4. The method as claimed in claim 3 wherein the credit source
is a telephone service provider at which said telephone number
is registered and the customer is billed for the amount of
said payment on a telephone account.

5. The method as claimed in claim 4 wherein said one or more
delivery addresses include a billing address for said
telephone account

6. The method as claimed in claim 5 and including the further
step of the credit source providing to said credit
verification operator an approval number for said transaction,
said approval number being linked to a serial number
previously allocated to said customer by said credit
verificatioon operator.

7. The method as claimed in claim 6 wherein in the event that
the credit verification operator does not have said serial
number allocated to the customer said customer is offered an
opportunity to obtain registration with said credit
verification operator.

8. The method as claimed in claim 7 wherein said registration
includes the customer providing said telephone number and said

one or more delivery addresses.

9. The method as claimed in claim 8 wherein said approval number is unique to said transaction.

10. The method as claimed in claim 9 and including the further step of the credit verification operator E-mailing information on the amount of said payment to the customer.

11. A method of facilitating a product purchase or hire transaction by a customer via the internet without the entry of a credit card number, said method including the steps of:-
 - providing a web site for a credit verification operator whereby said customer can access a shopping web site maintained by a merchant on the internet, select said product for purchase or hire from said merchant, access said web site for said credit verification operator, and enter personal identification information at said web site for said credit verification operator,
 - enabling said credit verification operator to verify said personal identification information against a data base containing one or more delivery addresses for said customer,
 - enabling said credit verification operator to validate said transaction with a credit source, and
 - enabling said credit verification operator to provide one of said delivery addresses to said merchant for delivery of said product,
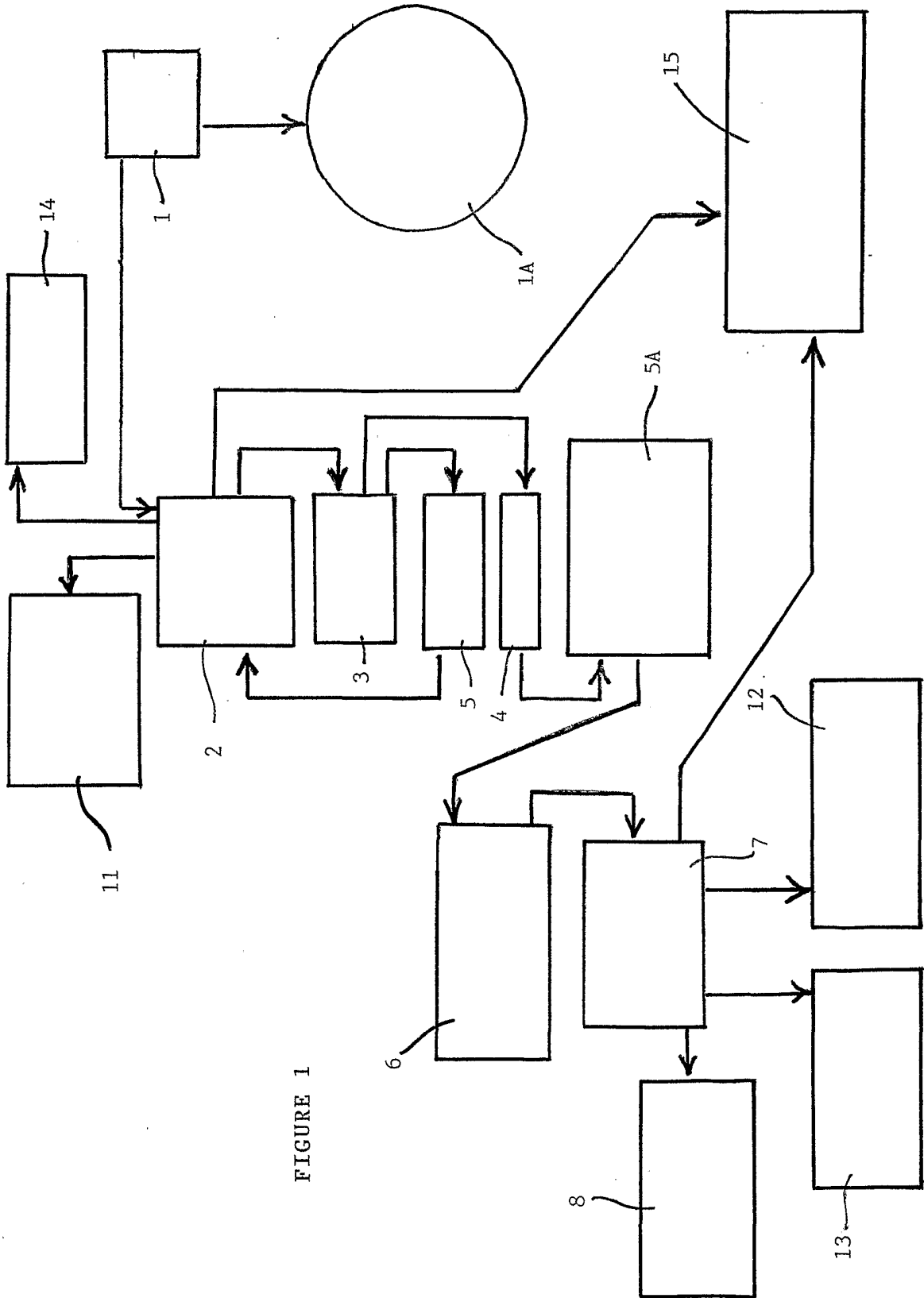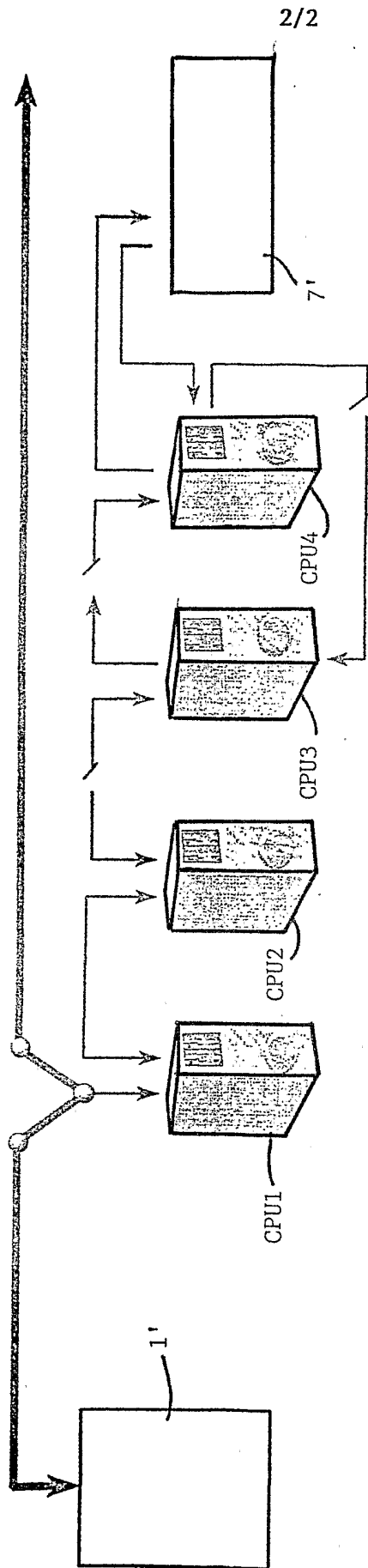
FIGURE 1

FIGURE 2

| A. | CLASSIFICATION OF SUBJECT MATTER |

Int. Cl. [7]: G06F 17/60

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)
IPC G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
AU:IPC AS ABOVE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WPAT, USPTO

| C. | DOCUMENTS CONSIDERED TO BE RELEVANT |

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,A	EP 1052603A, CHECKFREE CORPORATION, 15 November 2000	
P,A	WO 0075749A, INTELISHIELD.COM, INC, 14 December 2000	
P,A	WO 0070514A, CYBERMOOLA INC, 23 November 2000	

| X | Further documents are listed in the continuation of Box C | X | 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		
"E"	earlier application or patent but 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		
"P"	document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
20 July 2001	25 July 2001
Name and mailing address of the ISA/AU	Authorized officer
AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustralia.gov.au Facsimile No. (02) 6285 3929	S KAUL Telephone No : (02) 6283 2182

C (Continuation).   DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 9840809A, CHA TECHNOLOGIES, 17 September 1998	
A	WO 9802852A, SENG, 22 January 1998	

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report			Patent Family Member				
EP	1052603	AU	200028891				
WO	9840809	AU	65494/98	EP	1008022	NO	994428
		US	5903721				
WO	9802852	EP	855069	AU	66150/96		

END OF ANNEX