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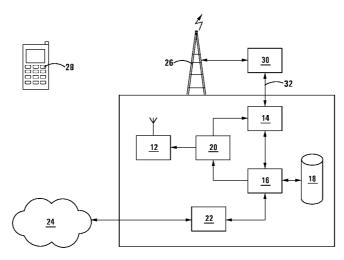
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[Continued on nextpage]

(54) Title: MATCHING BUYERS AND SELLERS



(57) Abstract: The invention provides a system for matching a first party with a second party, which includes a processor (16) for supplying information to a cellular telephone (28) of the first party and for processing responses received from the cellular telephone of the first party, a storage unit (18) for storing the information to be supplied to parties wishing to be matched and for storing data in respect of the first party, a message generating module (20) for generating a message to be sent to the first and/or the second party via a cellular telephone network (26), and a first interface (14) for connecting with an Unstructured Supplementary Service Data ("USSD") platform (30) such that the information supplied to the cellular telephone of the first party and the responses thereto are transferred between the processor and the cellular telephone in a USSD manner. Thus, the invention provides a method of matching a first party with a second party, by establishing a communication link (32) with an Unstructured Supplementary Service Data ("USSD") platform that is connected, via a USSD session, with a cellular telephone of the first party, supplying information to the cellular telephone of the first party via the USSD platform, receiving responses from the cellular telephone of the first party via the USSD platform, processing the responses from the first party, matching the first party with an appropriate second party, and generating and transmitting a message to the first and/or the second party via a cellular telephone network to introduce the two parties.



### **Published:**

— with international search report (Art. 21(3))

before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

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#### **MATCHING BUYERS AND SELLERS**

This invention relates to the matching of parties such as buyers and sellers of goods, services and property, and employers and employees by means of mobile telephones. More particularly it relates to a system for matching parties and to a method of matching parties.

Thus, according to a first aspect of the invention there is provided a system for matching a first party with a second party, which includes

a processor for supplying information to a cellular telephone of the first party and for processing responses received from the cellular telephone of the first party;

a storage unit for storing the information to be supplied to parties wishing to be matched and for storing data in respect of the first party;

a message generating module for generating a message to be sent to the first and/or the second party via a cellular telephone network; and

a first interface for connecting with an Unstructured Supplementary Service Data ("USSD") platform such that the information supplied to the cellular telephone of the first party and the responses thereto are transferred between the processor and the cellular telephone in a USSD manner.

According to a second aspect of the invention there is provided a method of matching a first party with a second party, which includes

establishing a communication link with an Unstructured Supplementary Service Data ("USSD") platform that is connected, via a USSD session, with a cellular telephone of the first party;

supplying information to the cellular telephone of the first party via the USSD platform;

receiving responses from the cellular telephone of the first party via the USSD platform;

processing the responses from the first party;

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matching the first party with an appropriate second party; and generating and transmitting a message to the first and/or the second party via a cellular telephone network to introduce the two parties,

It will thus be appreciated that the initial communication with the first party is via a USSD session.

As indicated above the parties may be buyers and sellers of goods, services and property, and people looking for work and employers seeking employees.

15 . The USSD platform may be located at a network operator or at an aggregator and the first interface may be connected therewith via a data line..

The first interface may be connected with the USSD platform only if the first party has sufficient funds in credit with the network operator. Thus, either the network operator or the aggregator may first check if the first party that is seeking to connect with a facility providing the matching service has sufficient funds, before connecting the USSD platform with the first interface.

The system may further include a GSM engine whereby the message is transmitted to the first and/or the second party. Alternatively this could be done by the aggregator, the message being supplied to the aggregator via the first interface.

The system may also include the USSD platform.

The message sent to the first and/or second party may be a text message (such as an SMS) or in an audio visual form (such as an MMS).

The system may further include a second interface for connecting the processor with the Internet, such that information may be received from the second

5 party via the Internet.

The invention will now be described by way of a non-limiting example, with reference to the accompanying schematic drawing which shows a system for matching and introducing parties in accordance with the invention.

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Referring to the drawing a system for matching and introducing parties in accordance with the invention is designated generally by reference numeral 10. The system 10 comprises a GSM engine 12, a first interface unit 14, a processor 16, a storage unit 18, a message generator 20 and a second interface 22. The first interface unit 14 communicates with a USSD platform 30 via a data line 32. The USSD platform is interconnected with a cellular telephone network, indicated generally by 26. The second interface 22 communicates with the Internet 24. The USSD platform 30 is located at a network operator or an aggregator.

Prospective sellers of goods, services and/or property and prospective employers, record their goods, services, property and positions via the Internet in conventional fashion, details of the goods, services, property and positions being stored in a structured manner in databases in the storage unit 18. If a prospective purchaser of the goods, services or property, or a person seeking work, wishes to investigate what is available, that person operates his cell phone 28 by dialing a predetermined number, and a USSD session is established with the USSD platform 30. The USSD platform checks if the person has a suitable credit balance with the relevant network operator, and if so, establishes a data connection with the first interface unit 14, via the data line 32. A USSD session is then conducted between the processor 16 and the cell phone 28, with the processor providing the person with various options and the person then selecting one of the available options. This is done in a USSD manner with various menus being sent to the cell phone 28, as determined by the processor 16, with the person responding accordingly, in an interactive manner. When the relevant information has been obtained from the

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5 person the USSD session is terminated and the processor checks the information in the relevant database to see if there is a match for the prospective purchaser or the person seeking work.

Thus, the processor 16 then determines if there is a match between the prospective purchaser or employee and any supplier or employer. If there is a match, the processor 16 arranges for the message generator to generate an appropriate SMS or MMS which is sent to the cell phone 28 by the GSM engine 12, using the person's cell phone number, which is supplied from the USSD platform 30 or is extracted from data supplied during the USSD session.

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It will be appreciated that prospective purchasers or employees could also submit their details via their cell phones 28, also using a USSD session.

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#### **CLAIMS:**

A system for matching a first party with a second party, which includes
 a processor for supplying information to a cellular telephone of the first party
 and for processing responses received from the cellular telephone of the first party;

a storage unit for storing the information to be supplied to parties wishing to be matched and for storing data in respect of the first party;

a message generating module for generating a message to be sent to the first and/or the second party via a cellular telephone network; and

a first interface for connecting with an Unstructured Supplementary Service Data ("USSD") platform such that the information supplied to the cellular telephone of the first party and the responses thereto are transferred between the processor and the cellular telephone in a USSD manner.

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- 2. The system as claimed in Claim 1, in which the parties are buyers and sellers of goods, services or property.
- 3. The system as claimed in Claim 1, in which the parties are people looking for work and employers seeking employees.
  - 4. The system as claimed in Claim 1, which includes a data line connecting the first interface with the USSD platform.
- 30 5. The system as claimed in Claim 1, in which the USSD platform is located at a network operator.
  - 6. The system as claimed in Claim 1, in which the USSD platform is located at an aggregator.

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- 7. The system as claimed in Claim 1, in which the first interface is connected with the USSD platform only if the first party has sufficient funds in credit with the network operator.
- 10 8. The system as claimed in Claim 1, which includes a GSM engine whereby the message is transmitted to the first and/or the second party.
  - 9. The system as claimed in Claim 6, in which the message is transmitted via the first interface to the cellular telephone of the first party, via the aggregator.

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- 10. The system as claimed in Claim 1, which includes the USSD platform.
- 11. The system as claimed in Claim 1, which includes a second interface for connecting the processor to the Internet.

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12. A method of matching a first party with a second party, which includes establishing a communication link with an Unstructured Supplementary Service Data ("USSD") platform that is connected, via a USSD session, with a cellular telephone of the first party;

25 supplying information to the cellular telephone of the first party via the USSD platform;

receiving responses from the cellular telephone of the first party via the USSD platform;

processing the responses from the first party;

cellular telephone network to introduce the two parties,

- matching the first party with an appropriate second party; and generating and transmitting a message to the first and/or the second party via a
- The method as claimed in Claim 12, in which the parties are buyers and 13.

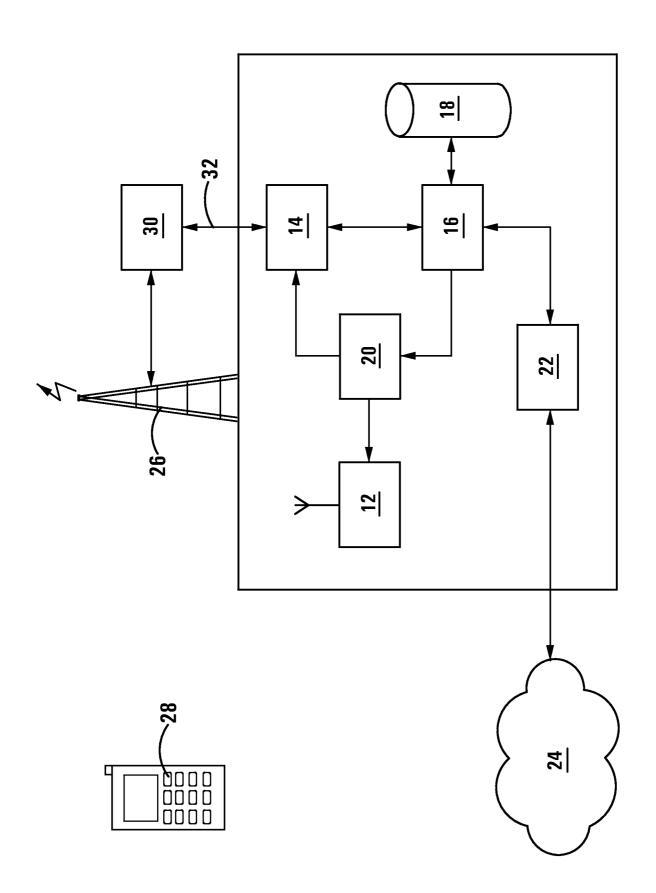
5 sellers of goods, services or property.

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- 14. The method claimed in Claim 12, in which the parties are people looking for work and employers seeking employees.
- 10 15. The method claimed in Claim 12, in which the USSD platform is located at a network operator.
  - 16. The method as claimed in Claim 12, in which the communication link with the USSD platform is via a data line.
  - 17. The method as claimed in Claim 12, in which the USSD platform is located at an aggregator.
- 18. The method as claimed in Claim 12, in which the communication link with 20 the USSD platform is established only if the first party has sufficient funds in credit with the network operator.
  - 19. The method as claimed in Claim 12, which includes directly transmitting the message to the first party and/or the second party.
  - 20. The method as claimed in Claim 17, which includes indirectly transmitting the message to the first party and/or the second party via the aggregator.
- The method as claimed in Claim 12, which includes receiving information from a second party via the Internet.
  - 22. A system for matching a first party with a second party, substantially as herein described, with reference to the accompanying drawing.

5 23. A method of matching a first party with a second party, substantially as herein described, with reference to the accompanying drawing.



# INTERNATIONAL SEARCH REPORT

International application No PCT/IB2011/052917

|   | rication of subject matter<br>H04L29/08 H04W4/14 G06Q30/0  | 0  |      |  |  |  |  |  |  |
|---|--|--|------|--|--|--|--|--|--|
| According to International Patent Classification (IPC) or to both national classification and IPC   |  |  |      |  |  |  |  |  |  |
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| Minimum documentation searched (classification system followed by classification symbols) H04L H04W G06Q  |  |  |      |  |  |  |  |  |  |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched   |  |  |      |  |  |  |  |  |  |
| Electronic d  | ata base consulted during the international search (name of data bas   | se and, where practical, search terms used)        |      |  |  |  |  |  |  |
| EPO-Inte  | ernal , WPI Data   |  |      |  |  |  |  |  |  |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT  |  |  |      |  |  |  |  |  |  |
| Category*   | Citation of document, with indication, where appropriate, of the rele  | Relevant to claim No.                              |      |  |  |  |  |  |  |
| X   | wo 2010/020482 AI (NOKIA SI EMENS NETWORKS 0Y [FI]; ALAKOSKI TIMO TAPANI [FI]; HARJU TEEMU) 25 February 2010 (2010-02-25) figures 1,3-5,7,8 page 5, line 18 - page 7, line 32 page 8, line 24 - page 11, line 32 page 13, line 30 - page 14, line 10 |  | 1-21 |  |  |  |  |  |  |
| А   | us 2007/214024 AI (JAIN GAURAV [II<br>13 September 2007 (2007-09-13)<br>the whole document   | N] ET AL)  | 1-21 |  |  |  |  |  |  |
| Furti   | her documents are listed in the continuation of Box C.   | X See patent family annex.                         |      |  |  |  |  |  |  |
| * Special categories of cited documents:  "A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier document but published on or after the international filing date  "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)  "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  "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  "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 cambined with one or more other such documents, such combination being obvious to a person skilled in the art.  "8" 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  "X" 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. |  |  |      |  |  |  |  |  |  |
| Date of the actual completion of the international search  3 November 2011  |  | Date of mailing of the international search report |      |  |  |  |  |  |  |
| Name and mailing address of the ISA/  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040,  Fax: (+31-70) 340-3016  |  | Authorized officer  Jeampi erre, Gerald            |      |  |  |  |  |  |  |

International application No. PCT/I B20 11/0529 17

## INTERNATIONAL SEARCH REPORT

| Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)   |
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| This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:   |
| 1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:   |
| 2. X Claims Nos.:  22, 23  because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  See FURTHER INFORMATION sheet PCT/ISA/2 1Q |
| 3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).  |
| Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)   |
| This International Searching Authority found multiple inventions in this international application, as follows:  |
| 1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.  |
| 2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.  |
| 3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers '——' only those claims for which fees were paid, specifically claims Nos.:   |
| 4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  |
| Remark on Protest  The additional search fees were accompanied by the applicant's protest and, where applicable, the '—' payment of a protest fee.  The additional search fees were accompanied by the applicant's protest but the applicable protest                                |
| '—' fee was not paid within the time limit specified in the invitation.  Location and the payment of additional search fees.   |
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#### FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuati on of Box 11.2

Cl aims Nos.: 22, 23

The subject-matter of independent claims 22 and 23 is merely defined by a vague reference to unclear description and to the drawing.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.2), should the problems which led to the Article 17(2) declaration be overcome.

## **INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No
PCT/IB2011/052917

|  |                  |                         | PCT/IB2 | 011/052917          |
|--|------------------|-------------------------|---------|---------------------|
| Patent document cited in search report | Publication date | Patent family member(s) |         | Publication<br>date |
| WO 2010020482                          | Al 25-02-2010    |                         |         | 25-02-2010          |
|  | Al 13-09-2007    |                         |         |                     |
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