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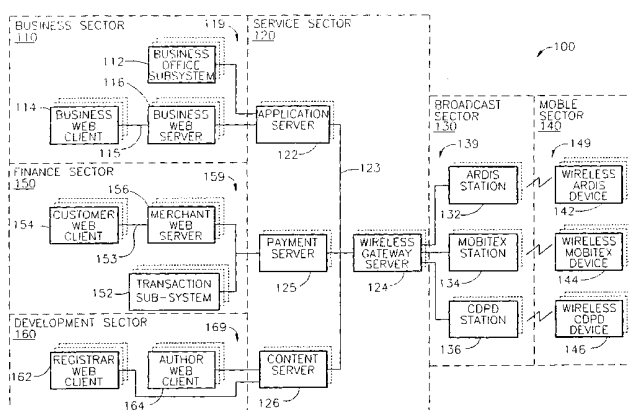
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4 July 2002

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: COMMUNICATION SYSTEMS, COMPONENTS, AND METHODS WITH PROGRAMMABLE WIRELESS DEVICES



(57) Abstract: A communication system includes a development sector for registering a plurality of wireless devices, a business sector for controlling utilization of an application program and for receiving application data, a service sector for deploying the application program and for providing the application data to the business sector and a mobile sector comprising the plurality of wireless devices, each device for receiving the application program deployed by the service sector, executing the application program in response to the business sector, and communicating with the service sector to support provision of the application data to the business sector. The wireless device, such as a cell phone, personal digital assistant, or palm top computer may include an auxiliary device such as a bar code scanner, a magnetic stripe card reader, or a printer. An application program on a wireless device may assist confirmation of an order made by a buyer via a web site. Fraud reporting is accomplished by comparing data obtained by registration of the wireless device with data provided in the confirmation.

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 01/04385

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06F9/46 G06F9/445

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 7 G06F H04Q G07F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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

EPO-Internal, WPI Data, INSPEC, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	<p>WO 96 27270 A (SICHER ALAN E ;PARKER MICHAEL (US); ERICSSON GE MOBILE INC (US); H) 6 September 1996 (1996-09-06)</p> <p>abstract page 2, line 33 -page 3, line 26 page 5, line 27 -page 6, line 1 page 9, line 28 -page 10, line 14</p> <p style="text-align: center;">-/--</p>	<p>1,5-7, 11,12, 35, 37-39, 41-43, 46,54, 56,57, 67-69, 81-83, 87,89-93 13,24, 32,36, 40,44, 45,47, 70,72,88</p>

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in 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 taken alone

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.

*& document member of the same patent family

Date of the actual completion of the international search

7 March 2002

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/04385

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>page 11, line 21 -page 12, line 13 page 13, line 34 -page 14, line 20 page 16, line 23 - last line ---</p> <p>WO 98 38820 A (ERICSSON TELEFON AB L M) 3 September 1998 (1998-09-03)</p>	<p>1,54,56, 57, 67-69, 87,89-93 24,32, 35,41, 47,70, 72,81,88</p>
A	<p>abstract page 2, line 2 - line 12 page 3, line 20 -page 4, line 26 page 5, line 7 - line 10 ---</p>	
X	<p>US 5 896 566 A (AVERBUCH ZIVA ET AL) 20 April 1999 (1999-04-20)</p>	<p>1,24,31, 67-69, 87,89-93 32,35, 41,47, 54,70, 72,81</p>
A	<p>abstract column 2, line 9 - line 33 column 3, line 50 - line 63 column 4, line 20 -column 5, line 50 ---</p>	
A	<p>US 5 754 954 A (GHOMESHI MOHAMMAD M ET AL) 19 May 1998 (1998-05-19)</p>	<p>1,24,32, 35,41, 47,54, 67,69, 70,72, 81,87</p>
X	<p>abstract column 1, line 56 - last line column 3, line 14 - line 61 column 4, line 22 -column 2, line 19 ---</p> <p>US 5 986 565 A (ISAKA ISAO) 16 November 1999 (1999-11-16)</p>	<p>75-78</p>
A	<p>abstract column 2, line 1 - line 32 column 3, line 47 -column 4, line 30 ---</p>	<p>79,80</p>
X	<p>EP 0 875 871 A (SCHMITZ KIM) 4 November 1998 (1998-11-04)</p>	<p>75-78</p>
A	<p>abstract column 1, line 33 -column 2, line 25 ---</p> <p style="text-align: center;">-/--</p>	<p>79,80</p>

INTERNATIONAL SEARCH REPORT

In International Application No

PCT/US 01/04385

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	NL 1 007 409 C (KONINKLIJKE PTT NEDERLAND N.V.) 2 February 1998 (1998-02-02)	75,77,78
A	abstract page 2, line 1 - line 26 ---	76,79,80
A	US 6 012 144 A (PICKETT THOMAS E) 4 January 2000 (2000-01-04) abstract column 3, line 50 -column 4, line 59 column 6, line 23 - line 44 ---	75-80
A	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 05, 31 May 1999 (1999-05-31) & JP 11 045366 A (ATENSHIYON SYST KK), 16 February 1999 (1999-02-16) abstract -----	75

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 01/04385

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

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. ☐ Claims Nos.:
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:

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 II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

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 fee, this Authority did not invite payment of any additional fee.
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.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-74, 81-93

A communication system having a business sector, a service sector and wireless devices which receive an application program, controlled by the business sector, deployed by the service sector.

2. Claims: 75-80

A method for confirming a payment arrangement and, if necessary, providing notice of a fraud to a predetermined address.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/04385

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