**Title:** METHOD AND SYSTEM FOR PROVIDING PIGGYBACK ROAMING FOR SPONSORING SPLIT ROAMING RELATIONSHIPS

**Abstract:** A method for facilitating exchange of one or more signaling messages between a client network and an HSRP network. The method includes identifying by an SPRS router associated with a client network, one or more parameters in the received signaling messages so as to determine from the parameters one or more roaming agreements that are required between the client network and the HSRP network, to allow exchange of the signaling messages. The method further includes facilitating by the SPRS router, exchange of the signaling messages between the client network and the HSRP network via one or more SPRS hubs, when the SPRS router determines absence of the required roaming agreements. The method further includes facilitating by the SPRS router, direct exchange of the signaling messages between the client network and the HSRP network, when the SPRS router determines presence of the required roaming agreements.
### INTERNATIONAL SEARCH REPORT

**INTERNATIONAL SEARCH REPORT**

**PCT/US2008/003966**

**A. CLASSIFICATION OF SUBJECT MATTER**

| INV. | H0407/38 |

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)

H04Q

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

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

EPO-Internal, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<tbody>
<tr>
<td>X</td>
<td>GB 2 322 998 A (VODAFONE LTD [GB]) 9 September 1998 (1998-09-09)</td>
<td>1,3-5, 23-27, 29-36</td>
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| Y        | page 8, line 5 – page 9, line 18  
page 12, line 8 – page 14, line 10  
page 16, line 15 – page 17, line 15  
figure 1 | 2,6,7,28 |
| Y        | US 6 577 723 B1 (MOONEY CHRISTOPHER [US]) 10 June 2003 (2003-06-10) claims 1-5 abstract; figure 5 | 2,6,7,28 |

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**D. DATE OF THE ACTUAL COMPLETION OF THE INTERNATIONAL SEARCH**

12 September 2008

**D. DATE OF MAILING OF THE INTERNATIONAL SEARCH REPORT**

13/01/2009

Name and mailing address of the ISA/Authorized officer

European Patent Office, P.B. 5816 Patentlaan 2
NL – 2280 HV Rijswijk
Tel: (+31-70) 540-2040, Fax: (+31-70) 340-3016

Schorgg, Alfred
<table>
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<td>A</td>
<td>WO 2004/075579 A (ROAMWARE INC [US]; JIANG YUE JUN [US])&lt;br&gt;2 September 2004 (2004-09-02)&lt;br&gt;page 5, line 1 - line 13&lt;br&gt;page 6, line 14 - page 9, line 29; figures 3-5</td>
<td>1-7, 23-36</td>
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</tbody>
</table>
INTERNATIONAL SEARCH REPORT

Box No. II  Observations where certain claims were found unsearchable (Continuation of item 2 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 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:

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 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. X □ 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.:

   1–7, 23–36

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.

□ No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet (2)) (April 2005)
This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-7, 23-36

   The first invention is related to methods, a system and a computer program product for exchanging signaling messages taking into account the existence of roaming agreements with a focus on the actual transmission of the signaling messages by SPRS routers and SPRS hubs.

2. claims: 1, 8-10

   The second invention is related to a method for exchanging signaling messages taking into account the existence of roaming agreements with detection of a registration attempt of an outbound roamer of a client network at a HSRP network.

3. claims: 1, 11

   The third invention is related to a method for exchanging signaling messages taking into account the existence of roaming agreements supporting the transmission of SMS to outbound roamers.

4. claims: 1, 12-22

   The fourth invention is related to a method for exchanging signaling messages taking into account the existence of roaming agreements with detection of a registration attempt of an inbound roamer at the client network.
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<td>GB 2322998 A</td>
<td>09-09-1998</td>
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<td>WO 9837709 A2</td>
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<td>02-09-2004</td>
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