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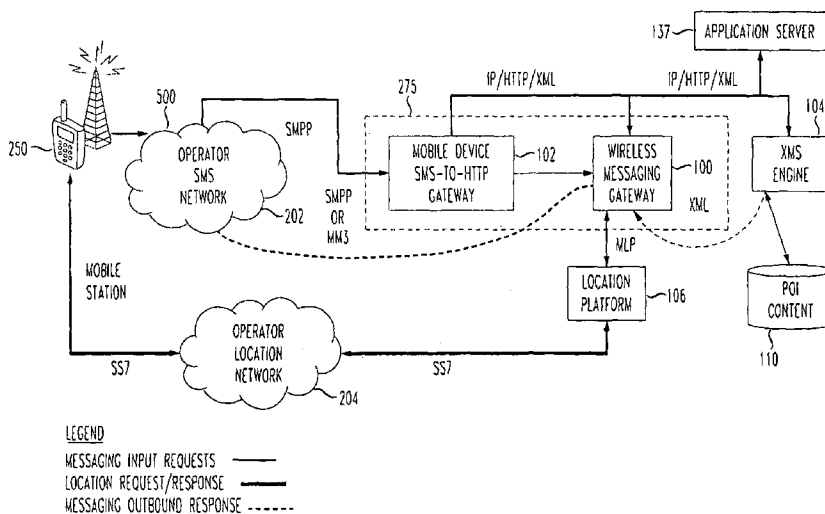
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(54) Title: SHORT MESSAGING SYSTEM (SMS) PROXY COMMUNICATIONS TO ENABLE LOCATION BASED SERVICES IN WIRELESS DEVICES



(57) Abstract: Wireless devices communicate (using SMS messaging) with a proxy server (e.g., a wireless messaging gateway) to generate network initiated requests. In this way, a wireless device which might not otherwise be able to, can now participate in advanced applications such as location based services (LBS) communities, thus extending LBS presence type information to non-programmable wireless devices. Short messaging system (SMS) functionality is implemented as a least-common-denominator means enabling standardized communication between a wireless device and a wireless device application. Wireless devices use SMS messaging as a proxy communications means to communicate with a proxy server (e.g., a wireless messaging gateway) to generate network initiated requests. The network initiated requests are packaged within SMS messages, allowing wireless devices a simple mechanism for participating in, e.g., location based services (LBS) communities, and for generally extending LBS presence type information to non-programmable handset devices.

WO 2008/010990 A3

INTERNATIONAL SEARCH REPORT

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<p>A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - H04Q 7/20 (2007.10) USPC - 455/456.1 According to International Patent Classification (IPC) or to both national classification and IPC</p>													
<p>B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC(8): H04Q 7/20 (2007.10) USPC: 455/456.1</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC: 455/456.3, 466; 340/539.13, 573.4; 705/1 (text search)</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WEST(USPT,PGPB,EPAB,JPAB,USOCR); DialogPRO(Engineering); Google Search terms: SMS Short Message Serviceproxy gateway hub distribution central server station extract convert parse translate encapsulate decode query request command demand hypertext protocol http www cellular satellite mobile portable wireless phone pda</p>													
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:10%;">Category*</th> <th style="width:70%;">Citation of document, with indication, where appropriate, of the relevant passages</th> <th style="width:20%;">Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td align="center">X</td> <td>US 2004/0203900 A1 (CEDARVALL et al.) 14 October 2004 (14.10.2004), fig 1, 5; para [0014]-[0085].</td> <td align="center">1-34</td> </tr> <tr> <td align="center">A</td> <td>US 2006/0116138 A1 (SIMSEK et al.) 01 June 2006 (01.06.2006), para [0028]-[0043].</td> <td align="center">1, 12, 22, 27</td> </tr> <tr> <td align="center">A</td> <td>US 2005/0277432 A1 (VIANA et al.) 15 December 2005 (15.12.2005), para [0004], [0015], [0020], [0021], [0027], [0033], [0035], [0038].</td> <td align="center">1, 12, 22, 27</td> </tr> </tbody> </table>		Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X	US 2004/0203900 A1 (CEDARVALL et al.) 14 October 2004 (14.10.2004), fig 1, 5; para [0014]-[0085].	1-34	A	US 2006/0116138 A1 (SIMSEK et al.) 01 June 2006 (01.06.2006), para [0028]-[0043].	1, 12, 22, 27	A	US 2005/0277432 A1 (VIANA et al.) 15 December 2005 (15.12.2005), para [0004], [0015], [0020], [0021], [0027], [0033], [0035], [0038].	1, 12, 22, 27
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<p><input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/></p>													
<table border="0" style="width:100%;"> <tr> <td style="width:50%; vertical-align: top;"> <p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </td> <td style="width:50%; vertical-align: top;"> <p>"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</p> <p>"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</p> <p>"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</p> <p>"&" document member of the same patent family</p> </td> </tr> </table>		<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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</p> <p>"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</p> <p>"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</p> <p>"&" document member of the same patent family</p>										
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<p>Date of the actual completion of the international search</p> <p>25 November 2007 (25.11.2007)</p>	<p>Date of mailing of the international search report</p> <p align="center">07 FEB 2008</p>												
<p>Name and mailing address of the ISA/US</p> <p>Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201</p>	<p>Authorized officer:</p> <p align="right">Lee W. Young</p> <p>PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774</p>												