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AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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WO 2017/121812 A3

(54) Title: ENHANCEMENTS TO THE EPDG SELECTION PROCESS IN A VISITED COUNTRY

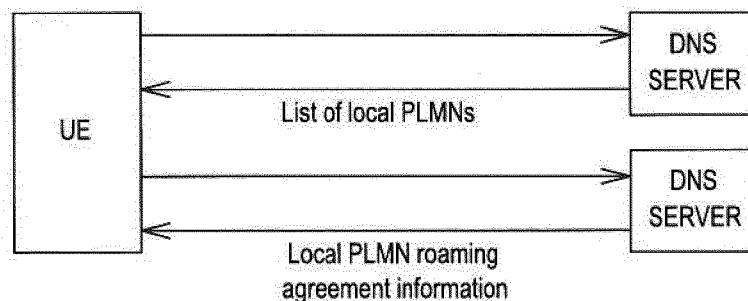


Fig. 2

(57) Abstract: An embodiment of the invention is a User Equipment UE, configured to: • - determine a country the UE is located in, • - get a list of PLMNs of the country the UE is located in, referred to as local PLMNs, via DN query, • - perform selection of an ePDG that is operated by one of the local PLMNs which have roaming agreements for untrusted WLAN access with the UE's HPLMN.

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2017/050587

A. CLASSIFICATION OF SUBJECT MATTER
 INV. H04W48/18 H04W4/22
 ADD. H04W8/08 H04W48/00

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)
 H04W

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 practicable, search terms used)
 EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2012/168146 A1 (ERICSSON TELEFON AB L M [SE]; ROELAND DINAND [SE]) 13 December 2012 (2012-12-13)	1,2,5,6
Y	page 3, line 26 - line 32; figures 3,5 page 6, line 9 - line 30 page 13, line 24 - page 21, line 13 ----- -/--	3,4,7-10

Further documents are listed in the continuation of Box C.

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 application or patent 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 30 June 2017	Date of mailing of the international search report 14/07/2017
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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 Tozlovanu, Ana-Delia
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INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2017/050587

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>ALCATEL-LUCENT ET AL: "Additional ePDG selection considerations and corrections", 3GPP DRAFT; C1-160125 24.302 R13 EPDG-CORRECTION, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE</p> <p>, vol. CT WG1, no. Nashville, US; 20160111 - 20160115 10 January 2016 (2016-01-10), XP051049057, Retrieved from the Internet: URL:http://www.3gpp.org/ftp/Meetings_3GPP_SYNC/CT1/Docs/ [retrieved on 2016-01-10] section 7.2.1</p>	1-8
Y	<p>ALCATEL-LUCENT ET AL: "Visiting network configuration for ePDG selection", 3GPP DRAFT; C1-154347 24.312 R13 EPDG-LI, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE</p> <p>, vol. CT WG1, no. Anaheim (CA), USA; 20151116 - 20151120 16 November 2015 (2015-11-16), XP050997671, Retrieved from the Internet: URL:http://www.3gpp.org/ftp/Meetings_3GPP_SYNC/CT1/Docs/ [retrieved on 2015-11-16] pages 1,2</p>	3,4,7,8
A	<p>US 2012/322412 A1 (QIANG ZU [US]) 20 December 2012 (2012-12-20) paragraphs [0022], [0035] - paragraph [0041]</p>	1-8
Y	<p>SCHULZRINNE COLUMBIA U B ROSEN MARCONI H: "Emergency Services for Internet Telephony Systems; draft-schulzrinne-sipping-emergency-arch-00.txt", 5. JCT-VC MEETING; 96. MPEG MEETING; 16-3-2011 - 23-3-2011; GENEVA; (JOINT COLLABORATIVE TEAM ON VIDEO CODING OF ISO/IEC JTC1/SC29/WG11 AND ITU-T SG.16); URL: HTTP://WFTP3.ITU.INT/AV-ARCH/JCTVC-SITE/,, 8 February 2004 (2004-02-08), XP015035061, ISSN: 0000-0004 pages 7,15</p>	9,10
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INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2017/050587

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	<p>ALCATEL-LUCENT ET AL: "How P-CSCF can detect emergency numbers in a VPLMN", 3GPP DRAFT; S2-160120 S8HR EN IN A VPLMN V0.0, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE</p> <p>, vol. SA WG2, no. Saint Kitts, KN; 20160125 - 20160129 17 January 2016 (2016-01-17), XP051059776, Retrieved from the Internet: URL:http://www.3gpp.org/ftp/Meetings_3GPP_SYNC/SA2/Docs/ [retrieved on 2016-01-17] page 1</p> <p style="text-align: center;">-----</p>	9,10

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2017/050587

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. 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.
- 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: 1-8

relates to the selection of a ePDG in a country the UE is located.

2. claims: 9, 10

relates to the determination of the local emergency numbers in a country the UE is located.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2017/050587

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2012168146 A1	13-12-2012	EP 2719155 A1	16-04-2014
		US 2014153559 A1	05-06-2014
		WO 2012168146 A1	13-12-2012

US 2012322412 A1	20-12-2012	CA 2839835 A1	27-12-2012
		EP 2721872 A1	23-04-2014
		US 2012322412 A1	20-12-2012
		WO 2012176141 A1	27-12-2012
