

(51) International Patent Classification:  
*H04W 64/00* (2009.01) *G01S 5/02* (2010.01)

(21) International Application Number:

PCT/US2013/069226

(22) International Filing Date:

8 November 2013 (08.11.2013)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/727,243 16 November 2012 (16.11.2012) US  
13/796,713 12 March 2013 (12.03.2013) US(71) Applicant: **QUALCOMM INCORPORATED** [US/US];  
ATTN: International IP Administration, 5775 Morehouse  
Drive, San Diego, California 92121-1714 (US).(72) Inventors: **GAO, Weihua**; 5775 Morehouse Drive, San  
Diego, California 92121-1714 (US). **WERNER, Ben-  
jamin A.**; 5775 Morehouse Drive, San Diego, California  
92121-1714 (US). **RIBA, Moi**; 5775 Morehouse Drive,San Diego, California 92121-1714 (US). **WILSON, Bruce  
E.**; 5775 Morehouse Drive, San Diego, California 92121-  
1714 (US).(74) Agents: **HUNTER CLARK PLLC** et al.; 900 Cummings  
Center, Suite 213-T, Beverly, Massachusetts 01915 (US).(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,  
BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, 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, KN, KP, KR,  
KZ, LA, LC, LK, LR, LS, LT, 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.(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ,

[Continued on next page]

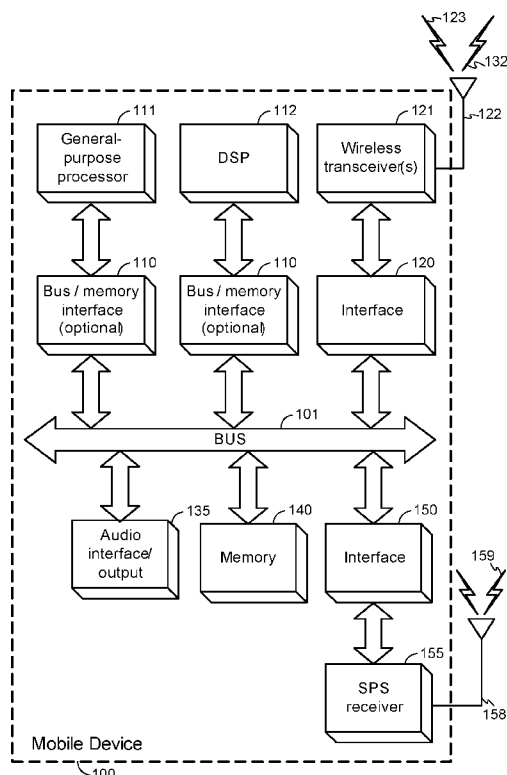
(54) Title: METHOD FOR CORROBORATION AND TRANSFERRING TRUST BETWEEN NETWORK DATABASES FOR  
ENHANCED POSITIONING ACCURACY

FIG. 1

(57) Abstract: Techniques for transferring trust between networks are de-  
scribed herein. An example of a method of using a mobile device to transfer  
trust between networks described herein includes receiving WAN base sta-  
tion information including a WAN base station trustworthiness value, de-  
termining a WAN position estimate for the mobile device based on the  
WAN base station information, receiving access point information including  
an access point trustworthiness value, determining an access point position  
estimate for the mobile device based on the access point information, de-  
termining if the WAN position estimate and the access point position esti-  
mate are corroborated, and increasing the access point trustworthiness value if  
the WAN position estimate and the access point position estimate are cor-  
roborated and the WAN base station trustworthiness value is higher than the  
access point trustworthiness value.



UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

**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))*

**Declarations under Rule 4.17:**

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

**(88) Date of publication of the international search report:**

14 August 2014

# INTERNATIONAL SEARCH REPORT

International application No

PCT/US2013/069226

A. CLASSIFICATION OF SUBJECT MATTER  
INV. H04W64/00 G01S5/02  
ADD.

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 G01S

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, COMPENDEX, INSPEC, IBM-TDB

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2011/250903 A1 (HUANG RONALD K [US] ET AL HUANG RONALD KERYUAN [US] ET AL) 13 October 2011 (2011-10-13)	4-7, 10-13, 19-22, 26-29, 42-49
A	abstract paragraph [0005] - paragraph [0008] paragraph [0022] - paragraph [0115] paragraph [0141] claims 1-22 figures 1,3A,3D,4A-8 ----- -/--	1-3,8,9, 14-18, 23-25, 30-41



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

20 June 2014

Date of mailing of the international search report

27/06/2014

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

Rosken, Wilfried

# INTERNATIONAL SEARCH REPORT

International application No

PCT/US2013/069226

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 2011/103360 A1 (KU KYOJUN [KR] ET AL) 5 May 2011 (2011-05-05) abstract paragraphs [0014] - [0017] paragraphs [0040] - [0211] paragraphs [0238] - [0271] claims 1-29 figures 1-6 -----	46-49 1-45
X A	US 2011/183626 A1 (DAS SAUMITRA MOHAN [US] ET AL) 28 July 2011 (2011-07-28) abstract paragraph [0007] - paragraph [0015] paragraphs [0038], [0044] paragraphs [0054] - [0081] figures 1-3 -----	46-49 1-45

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2013/069226

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2011250903 A1	13-10-2011	US 2011250903 A1	13-10-2011
		US 2013196686 A1	01-08-2013
US 2011103360 A1	05-05-2011	EP 2327995 A2	01-06-2011
		JP 5258865 B2	07-08-2013
		JP 2011099859 A	19-05-2011
		US 2011103360 A1	05-05-2011
US 2011183626 A1	28-07-2011	TW 201146055 A	16-12-2011
		US 2011183626 A1	28-07-2011
		WO 2011091175 A1	28-07-2011