

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2017/076350

A. CLASSIFICATION OF SUBJECT MATTER

G01C 21/34 (2006.01) i; H04B 17/318 (2015.01) i

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)

G01C; H04B

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)

EPODOC, WPI, CNPAT, IEEE, CNKI: 前海达闾, 导航, 路径, 路线, 制式, 移动, 联通, 电信, 无线, 网络, 信号, 强度, 覆盖, navi+, route?, path??. wireless, quality, signal, strength

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 8311741 B1 (GOOGLE INC.), 13 November 2012 (13.11.2012), description, column 1, lines 31-44, column 6, lines 18-27, columns 9-11 and column 12, lines 48-55, figures 1-5, and claims 1, 16 and 24	1-11
X	US 2010036604 A1 (IBM CORP.), 11 February 2010 (11.02.2010), description, paragraphs [0025]-[0036], and figure 3	1-11
X	CN 103703842 A (HUAWEI TECHNOLOGIES CO., LTD.), 02 April 2014 (02.04.2014), description, paragraphs [0025]-[0033], and figures 10-14	1-11
X	CN 105009182 A (QUALCOMM INC.), 28 October 2015 (28.10.2015), description, paragraphs [0056]-[0065], and figure 7	1-11

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	“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
“A” document defining the general state of the art which is not considered to be of particular relevance	“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
“E” earlier application or patent but published on or after the international filing date	“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
“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)	“&” document member of the same patent family
“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	

Date of the actual completion of the international search

15 November 2017

Date of mailing of the international search report

29 November 2017

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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CN2017/076350

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
US 8311741 B1	13 November 2012	None	
US 2010036604 A1	11 February 2010	US 2014018061 A1	16 January 2014
		US 2015172908 A1	18 June 2015
		US 9055412 B2	09 June 2015
CN 103703842 A	02 April 2014	US 9175969 B2	03 November 2015
		US 2013024107 A1	24 January 2013
		EP 2705707 A1	12 March 2014
		EP 2705707 A4	21 May 2014
		WO 2013010508 A1	24 January 2013
CN 105009182 A	28 October 2015	US 2014257695 A1	11 September 2014
		KR 20150119474 A	23 October 2015
		JP 2016511408 A	14 April 2016
		JP 5922318 B2	24 May 2016
		EP 2965301 A2	13 January 2016
		US 9046370 B2	02 June 2015
		KR 101665573 B1	24 October 2016
		CN 105009182 B	22 March 2017
		WO 2014137699 A2	12 September 2014
		WO 2014137699 A3	06 November 2014
		IN 201502147 P3	27 May 2016
		BR 112015021715 A2	18 July 2017