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(54) Title: ENHANCED LOCATION SERVICE NEGOTIATION

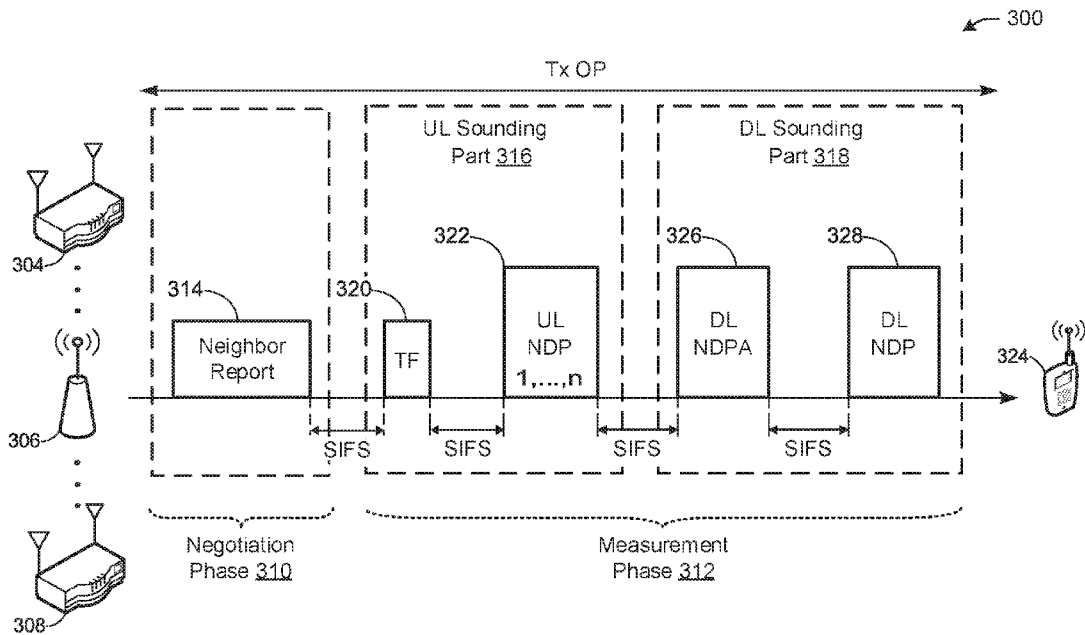


FIG. 3

(57) Abstract: This disclosure describes systems, methods, and devices related to enhanced location service negotiation. A device may identify a neighbor report frame received from one or more coordinated access points (APs), wherein the neighbor report frame comprises location capability support information. The device may determine a first ranging associated ID (RAID) associated with the location capability support information. The device may determine a first location measurement with a first coordinated AP of the one or more coordinated APs and a second location measurement with a second coordinated AP of the one or more coordinated APs using the first R-AID.



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).

**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))*

**Published:**

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## INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/US2017/067709****A. CLASSIFICATION OF SUBJECT MATTER****H04W 64/00(2009.01)i, H04W 56/00(2009.01)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)  
H04W 64/00; G06F 17/30; H04W 24/00; H04W 24/02; H04W 4/02; H04W 4/24; H04W 56/00Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
Korean utility models and applications for utility models  
Japanese utility models and applications for utility modelsElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
eKOMPASS(KIPO internal) & Keywords: AP, device, neighbor report frame, location capability support information, ranging associated ID (R-AID)**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2013-0031001 A1 (STEPHEN PATRICK FRECHETTE et al.) 31 January 2013 See paragraphs [0041], [0046]; claims 1, 3, 5; and figures 1A, 4.	1-3, 9-15, 20-23
A		4-8, 16-19, 24-25
Y	US 2012-0258732 A1 (SEUNG-HYUK JEONG) 11 October 2012 See claim 1; and figure 9.	1-3, 9-15, 20-23
A	US 2012-0155302 A1 (SEUNG-HYUK JEONG) 21 June 2012 See paragraphs [0053]-[0056]; and figure 5.	1-25
A	US 2013-0196691 A1 (JIE LIANG) 01 August 2013 See paragraph [0030]; and figure 1.	1-25
A	WO 2016-126280 A1 (INTEL IP CORPORATION) 11 August 2016 See page 13, line 3 - page 14, line 13; and figure 6.	1-25

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

\* Special categories of cited documents:

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"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

"&amp;" document member of the same patent family

Date of the actual completion of the international search

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2017/067709**

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2013-0031001 A1	31/01/2013	US 2014-0108201 A1	17/04/2014
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