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[Continued on next page]

(54) Title: ENHANCING POSITIONING IN MULTI-PLMN DEPLOYMENTS

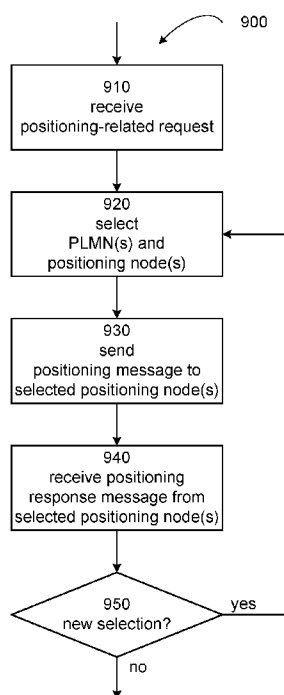


FIGURE 9

(57) **Abstract:** Network sharing allows different core network operators to connect to a shared radio access network. The operators may share the radio network elements, and may also share the radio resources themselves. Examples of radio access sharing architectures include GWCN and MOCN. In such multi-PLMN deployment scenarios, operators are also interested in sharing measuring nodes (1000, 630, 631, 632) due to their expense. To enable sharing, method(s), apparatus(es), and/or system(s) are proposed in which network nodes (700) may perform joint selection of positioning nodes (621, 622) and PLMNs (601, 602); in which positioning nodes (621, 622) of different PLMNs (601, 602) may communicate; in which a positioning node (621) may obtain and use assistance data associated with a PLMN (602) different from that of the positioning node (621); and to coordinate positioning measurement.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC: see extra sheet

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)

IPC: H04W

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE, DK, FI, NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, PAJ, WPI data, COMPENDEX, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	3GPP TSG-RAN WG2 Meeting #78; Prague, Czech Republic 21-25 Nat 2012; R2-122116; Draft CR for TS 36.305; NBPS Support in LTE; published 2012-05-14 URL: http://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_78/Docs/ ; whole document; figures 5.1-1, 8.X.3.1-1; especially chapters 4.3.x, 5.1, 5.3.3 and 6.1.X	1-3, 7-23, 27-43
A	--	4-6, 24-26



Further documents are listed in the continuation of Box C.



See patent family annex.

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Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	3GPP TS 36.305 V11.0.0 (2012-06); 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Stage 2 functional specification of User Equipment (UE) positioning in E-UTRAN(Relase 11); Published: 2012-07-02 URL: http://www.3gpp.org/DynaReport/36305.htm; figures 5.1-1; chapters 4.3.4, 5.1 and 6.2.1 --	1-43
A	3GPP TS 23.271 V10.2.0 (2011-03); 3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Functional stage 2 description of Location Services (LCS) (Release 10); Published: 2011-03-28 URL: http://www.3gpp.org/DynaReport/23271.htm; chapters 4, 5.5.1 and 6.3.13 --	1-43
A	3GPP TS 36.355 V10.5.0 (2012-06); 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA); LTE Positioning Protocol (LPP) (Release 10); Published: 2012-07-02 URL: http://www.3gpp.org/DynaReport/36355.htm; whole document --	1-43
A	3GPP TS 36.401 V10.4.0 (2012-06); 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Architecture description (Release 10); Published: 2012-07-02 URL: http://www.3gpp.org/DynaReport/36401.htm; whole document --	1-43

INTERNATIONAL SEARCH REPORT

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	3GPP TS 29.171 V11.1.0 (2012-03); 3rd Generation Partnership Project; Technical Specification Group Core Network and Terminals; Location Services (LCS); LCS Application Protocol (LCS-AP) between the Mobile Management Entity (MME) and Evolved Serving Mobile Location Centre (E-SMLC); SLs interface (Release 11); Published: 2012-03-22 URL: http://www.3gpp.org/DynaReport/29171.htm; whole document -- -----	1-43

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