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(54) Title: METHOD AND SYSTEM FOR DETERMINING LOCATION USING A HYBRID SATELLITE AND WLAN POSITIONING SYSTEM BY SELECTING THE BEST WLAN-PS SOLUTION

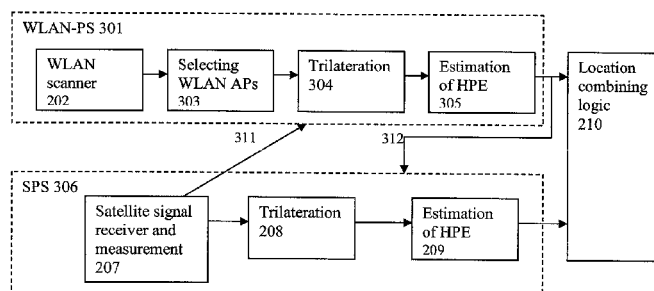


Figure 3

(57) Abstract: Embodiments of the disclosed subject matter provide a method of integrating a WLAN- based positioning system (WLAN-PS) and a satellite -based positioning system (SPS) to create a hybrid positioning system. An integrated or hybrid system refers to a system which combines the measurements from one or more systems to improve the accuracy of the positioning and velocity and bearing estimates and the accuracy of expected error estimate, and to reduce consumed power as compared to each individual system working independently. The method of integrating a WLAN-PS and SPS to create a hybrid positioning system can add raw SPS measurements as another input to WLAN-PS and WLAN-PS final estimations as another input to SPS. Raw SPS measurements from two or more satellites can assist the WLAN-PS to increase the accuracy of position estimate, HPE, and stationary user detection.