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Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

[Continued on next page]

(54) Title: LOCATION-ASSISTED NETWORK ENTRY, SCAN, AND HANDOVER

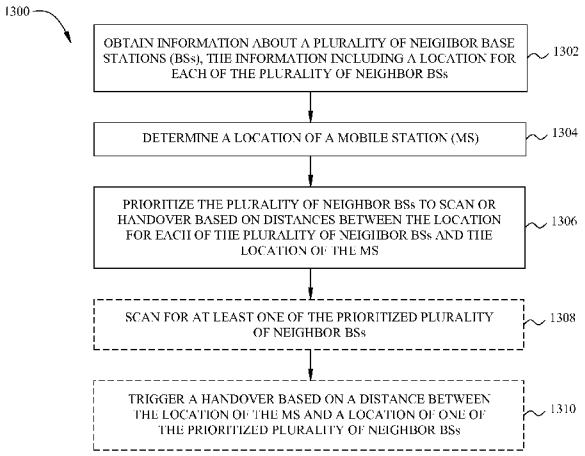


FIG. 13

(57) Abstract: Methods and apparatus for using a location of a mobile station (MS) to assist network entry and initialization, scanning, and/or handover operations in a radio access technology (RAT), such as WiMAX (Worldwide Interoperability for Microwave Access), are provided. The location of the MS may be ascertained by determining the Global Positioning System (GPS) coordinates of the MS internally or by receiving the location from a GPS device external to the MS. Knowledge of the current or future location of the MS may reduce the amount of base station (BS) information transmitted to the MS; may reduce the power consumption and the amount of time spent during network entry, scanning, or handover; and may increase the bandwidth usage efficiency.

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