ABSTRACT

An ad hoc radio base station and a method for locating a user apparatus are presented. The method comprises setting up (400) two ad hoc cells, a first cell of the two ad hoc cells providing an omnidirectional cell and a second cell of the ad hoc cells providing a directional cell, utilizing a set of directional or beamforming antennas, the main lobes of the antennas of the cells being directed at different directions from each other, one antenna of the second cell being active at a time; setting up (402) a radio connection in one of the two ad hoc cells to an user apparatus; obtaining (404) information on the signal-to-noise ratio measured by the user apparatus from of the signal received by the user apparatus and Timing Advance required on the radio connection; transmitting (406) a redirection message to other cell of the two ad hoc cells in the first radio connection to the user apparatus, repeating (408) the above obtaining and transmitting steps a given number of times, and determining (410) the location of the user apparatus based on the obtained information.

(FIG. 4)

AD HOC RADIO BASE STATION

ABSTRACT

An ad hoc radio base station and a method for locating a user apparatus are presented. The method comprises setting up (400) two ad hoc cells, a first cell of the two ad hoc cells providing an omnidirectional cell and a second cell of the ad hoc cells providing a directional cell, utilizing a set of directional or beamforming antennas, the main lobes of the antennas of the cells being directed at different directions from each other, one antenna of the second cell being active at a time; setting up (402) a radio connection in one of the two ad hoc cells to an user apparatus; obtaining (404) information on the signal-to-noise ratio measured by the user apparatus from of the signal received by the user apparatus and Timing Advance required on the radio connection; transmitting (406) a redirection message to other cell of the two ad hoc cells in the first radio connection to the user apparatus, repeating (408) the above obtaining and transmitting steps a given number of times, and determining (410) the location of the user apparatus based on the obtained information.

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