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(54) Title: SPARSE ANTENNA ARRAY CALIBRATION

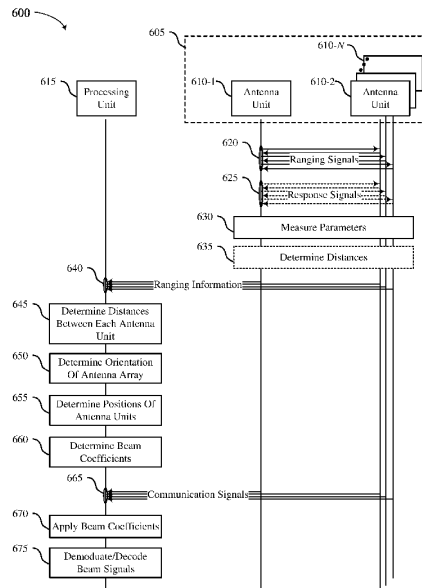


FIG. 6

(57) Abstract: A system for communications may include an antenna array, where an inter-element spacing of antennas of the antenna array may be different across the antenna array; antenna managers that are coupled with respective antennas and configured to transmit and receive ranging signals used to measure parameters representative of distances between a respective antenna and the other antennas; a calibration unit that determines positions of the antennas based on the measured parameters and positions of reference antennas; and a communications manager that communicates with a terminal according to beam coefficients determined for the antenna array based on the determined positions of the antennas.

WO 2022/150292 A1

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