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(54) **DIRECTED WIRELESS COMMUNICATION**

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(58) **Field of Classification Search**
None

See application file for complete search history.

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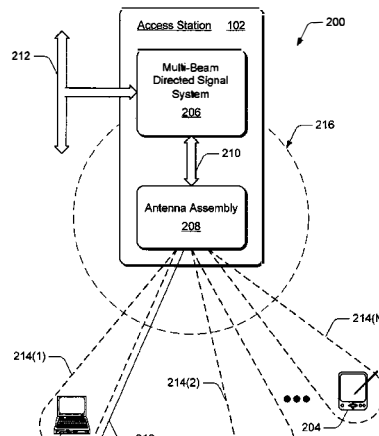
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(57) **ABSTRACT**

Disclosed herein are methods and apparatuses configured to direct wireless communication. In some embodiments, a network apparatus is configured to: receive a first signal transmission from a remote station via a first antenna element of an antenna and a second signal transmission from the remote station via a second antenna element of the antenna simultaneously; determine first signal information for the first transmission; determine second signal information for the second transmission, wherein the second signal information is different than the first signal information; determine a set of weighting values based on the first signal information and the second signal information, wherein the set of weighting values is configured to construct one or
(Continued)



more beam-formed transmission signals; and generate the one or more beam-formed transmission signals based on the set of weighting values for transmission to the remote station.

19 Claims, 18 Drawing Sheets

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