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(54) **Title:** ACKNOWLEDGEMENT MECHANISM IN FREQUENCY MULTIPLEXED COMMUNICATION IN DENSE WIRE-
LESS ENVIRONMENTS

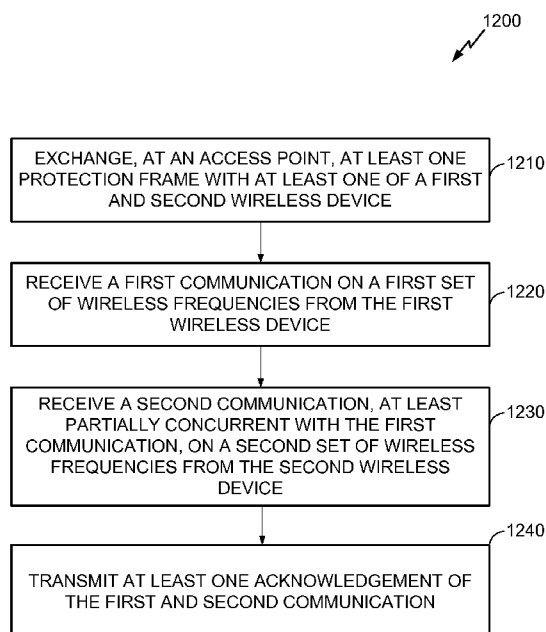


FIG. 12

(57) **Abstract:** Systems, methods, and devices for high-efficiency wireless frequency division multiplexing are provided. A method includes exchanging, at an access point, at least one frame reserving a wireless medium with at least one of a first and second wireless device. The method further includes receiving a first communication on a first set of wireless frequencies from the first wireless device. The method further includes receiving a second communication, at least partially concurrent with the first communication, on a second set of wireless frequencies from the second wireless device. The method further includes transmitting at least one acknowledgment of the first and second communication. The first set and the second set are mutually exclusive subsets of a set of wireless frequencies available for use by both the first and second wireless device.



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