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(54) Title: SPECTRUM ALLOCATION FOR MULTIPLE RESOURCE UNITS IN WIRELESS NETWORK

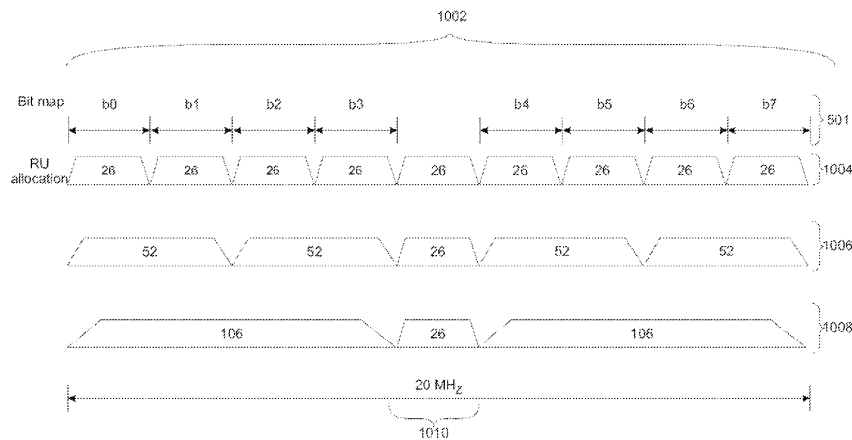


FIGURE 11

(57) Abstract: Methods, devices and systems for allocating spectrum in a wireless local area network. A bit representation of the availability or unavailability of a plurality of sub-bands of a portion of frequency spectrum is generated and included in a physical layer protocol data unit, which is transmitted to a target station to allocate resource units within the portion of frequency spectrum for use by the target station. The sub-bands may be 20 MHz spectrum sub-bands for large-size resource units, or the portion of frequency spectrum may be a single 20 MHz band sub-divided into multiple sub-bands for allocating small-size resource units. A station that receives the data unit may decode the bit representation and use the allocated resource units to communicate over the wireless local area network.

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